ORDER No.MD0005087C3

Service Manual

CD Stereo System

*1 DOLBY SURROUND PRO • LOGIC

SA-AK58

Colour

(S) ..... Silver Type

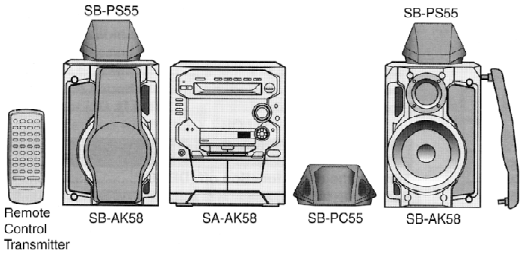
Areas

(GN) ..... Oceania.

TAPE SECTION : AR2 MECHANISM SERIES

CD SECTION : RAE0152Z-M TRAVERSE DECK SERIES

SYSTEM : SC-AK58



SPECIFICATIONS

Specifications

● AMPLIFIER SECTION

RMS power output	
THD 10%, both channels driven	
Front (Low)	110W per channel (6 Ω)
Front (High)	40W per channel (6 Ω)
Total Bi-amp power	150W per channel (6 Ω)
Power output in	
Dolby Pro Logic mode	
RMS power output	
THD 10%, both channels driven	
Front (Low)	110W per channel (6 Ω)
Front (High)	40W per channel (6 Ω)
Center 1kHz	30W (8 Ω)
Surround 1kHz	15W per channel (4 Ω)
Total power output	360W
/ Input sensitivity	
AUX	250mV
Input impedance	
AUX	13.9k Ω

● FM TUNER SECTION

Frequency range	87.5 - 108.00MHz / (50kHz steps)
Sensitivity	2.5 μ V (IHF)
S/N 26dB	2.2 μ V
Antenna terminal (s)	75 Ω (unbalanced)

● AM TUNER SECTION

Frequency range	522 - 1629kHz (9kHz steps)
Sensitivity	
S/N 20dB	560 μ V/m

● CASSETTE DECK SECTION

Track system	4 track, 2 channel
Heads	
Record/playback	Soild permalloy head
Erasure	Double gap ferrite head
Motor	DC servo motor
Recording system	AC bias 100kHz
Erasing system	AC erase 100kHz
Tape speed	4.8cm/s
Over frequency response (+3, -6dB at DECK OUT)	
NORMAL (TYPE I)	35Hz - 14kHz
HIGH (TYPE II)	35Hz - 14kHz
S/N	50dB (A weight)
Wow and flutter	0.18% (WRMS)
Fast forward and rewind times	Approx. 120 seconds with C-60 cassette tape

● CD SECTION

Sampling frequency	44.1kHz
Decoding	16 bit linear
Beam source/wave length	Semiconductor laser/ / 780nm
Frequency response	20Hz - 20kHz (+1, -2dB)
Wow and flutter	Below measurable limit
Digital filter	8fs
D/A converter	MASH (1bit DAC)

● GENERAL

Power supply	AC230 - 240V, 50Hz
Power consumption	185W
Standby	
Normal mode	18W
Eco mode	0.4W
Dimensions (WxHxD)	270x331x338mm
Weight	8.4kg

Power consumption in standby mode

Eco mode on	0.25W
Eco mode off	18W

Notes:

1. Specifications are subject to change without notice. / Weight and dimensions are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer.

*1 Manufactured under license from Dolby Laboratories Locensing Corporation. “Dolby”, the double-D symbol and “PRO LOGIC” are trade marks of Dolby Laboratories Licensing Corporation.

● SYSTEM

SC-AK58 : / Main unit : SA-AK58
/ Front speakers : SB-AK58 /
Surround speakers : SB-PS55 /
Center Speakers : SB-PC55

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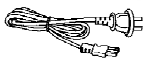
⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

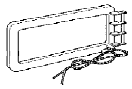
Panasonic®

1. Accessories

· AC power supply cord
(RJA0035-X) 1



· AM loop antenna
(RSA0029) 1



· Remote control transmitter
(RAK-SC961WK) 1

· FM indoor antenna
(RSA0006-J) 1

· Batteries for remote control transmitter
(R6/LR6, AA, UM-3) 2
Note : These are available on sales route.

2. Before Repair

1. **Turn off the power supply. Using a 10 Ω , 10W resistor, connect both ends of power supply capacitors (C571 - 574, 558) in order to discharge the voltage.**
2. **Before turning the power supply on, after completion of repair, slowly apply the primary voltage by using a power supply voltage controller to make sure that the consumed current at 50Hz in NO SIGNAL mode should be shown below with respect to supply voltage 230/230-240V.**

Power supply voltage	**AC230 - 240V, 50Hz**
Consumed current	**Less than 350mA**

3. Protection Circuitry

The protection circuitry may have operated if either of the following conditions are noticed:

- No sound is heard when the power is switched ON.

- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of the amplifier are used. / If this occurs, follow the procedure outlines below:

1. **Switch OFF the power.**
2. **Determine the cause of the problem and correct it.**
3. **Switch ON the power once again.**

Note:

When the protection circuitry functions, the unit will not operate unless the power is first switched OFF and ON again.

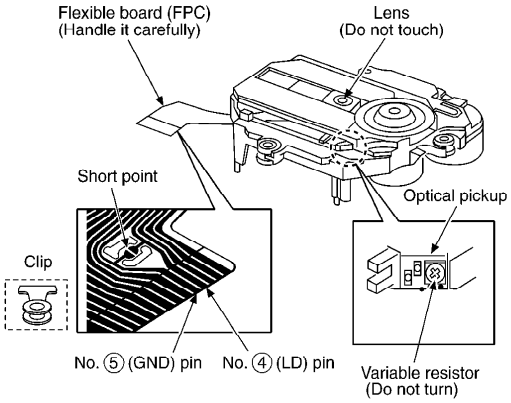
4. Handling Precautions for Traverse Deck

The laser diodes in the traverse deck (optical pickup) may break down due to potential difference caused by static electricity of clothes or human body. / So, be careful of electrostatic breakdown during repair of the traverse deck (optical pickup).

4.1. Handling the traverse deck / (optical pickup)

1. **The traverse deck (optical pickup) is an extremely high-precision construction and must not be subjected to impact, excessive vibration, or other types of rough handling.**
2. **In order to prevent static electricity damage to the laser diode, use a short pin or similar tool to short the optical pickup's flexible circuit boards after they have been disconnected from the main circuit board.**
3. **Handle the flexible circuit boards with care; excessive force could cause them to be broken.**
4. **Do not turn the pre-set variable resistor (for adjustment of the laser power); it has been adjusted at the factory. / (as shown in Fig.1)**

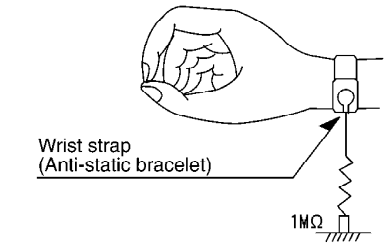
Fig.1

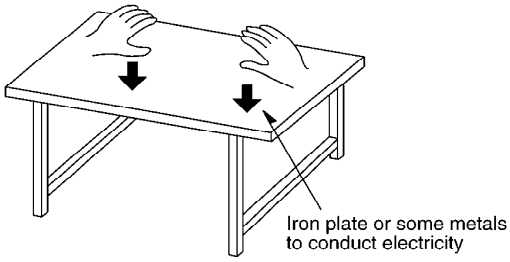


4.2. Grounding for electrostatic breakdown prevention

1. **Human body grounding / Use the anti-atatic wrist strap to discharge the static electricity from your body.**
2. **Work table grounding / Put a conductive material (sheet) or steel sheet on the area where the optical pickup is placed, and ground the sheet. (sa shown in Fig.2)**

Fig.2





Caution:

The static electricity of your clothes will not be grounded through the wrist strap. / So, take care not to let your clothes touch the traverse deck (optical pickup)

4.3. Caution when Replacing the Traverse Deck

The traverse deck has a short point shorted with solder protect the laser diode against electrostatic breakbown. Be sure to remove the solder from the short point before making connections.

CAUTION:

THIS PRODUCT UNTILIZES A LASER. USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

5. Precaution of Laser Diode

CAUTION: This product utilizes a laser diode with the unit turned "on", invisible laser radiation is emitted from the pick up lens.
Wave length: 780 nm
Maximum output radiation power from pick up: 100 µW/VDE

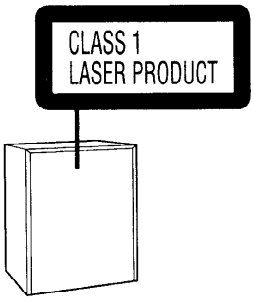
Laser radiation from the pick up unit is safety level, but be sure the followings:

1. Do not disassemble the pick up unit, since radiation from exposed laser diode is dangerous.
2. Do not adjust the variable resistor on the pick up unit. It was already adjusted.
3. Do not lock at the focus lens using optical instruments.
4. Recommend not to lock at pick up lens for a long time.

ACHTUNG: Dieses produkt enthält eine laserdiode. Im eingeschalteten zustand wird unsichtbare laserstrahlung von der lasereinheit adgestrahit.
Wellenlänge: 780 nm
Maximale strahlungsleistung der laserinhelt: 100 µW/VDE

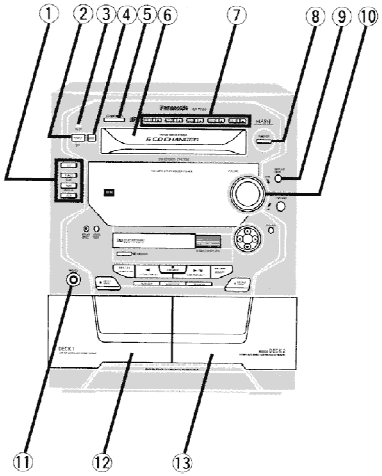
Die strahlung an der lasereinheit ist ungefährlich, wenn folgende punkte beachtet werden:

1. Die lasereinheit nicht zerlegen, da die strahlung an der freigelegten laserdiode gefährlich ist.
2. Den werksseitig justierten einstellregler der lasereinreit nicht verstellen.
3. Nicht mit optischen instrumenten in die fokussierlinse blicken.
4. Nicht über längere zeit in die fokussierlinse blicken.



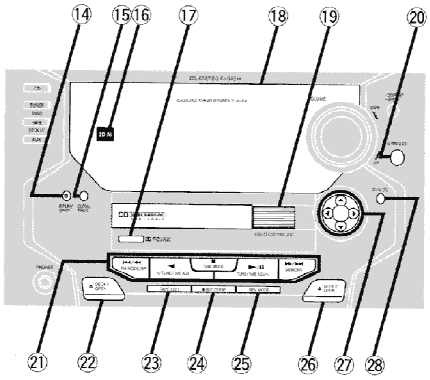
DANGER	INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM.	(Inside of product)
ADVARSEL	USYNLIG LASERSTRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.	(Indersiden at apparatet)
VARO!	AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTÖNTÄ LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.	(Tuotteen sisällä)
VARNING	OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.	(Apparatens insida)
ADVARSEL	USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES OG SIKKERHEDSLÅS BRYTES. UNNGÅ EKSPONERING FOR STRÅLEN.	(Produktets innside)
VORSICHT	UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.	(Im Inneren des Gerätes)

6. Location of Controls



Main unit

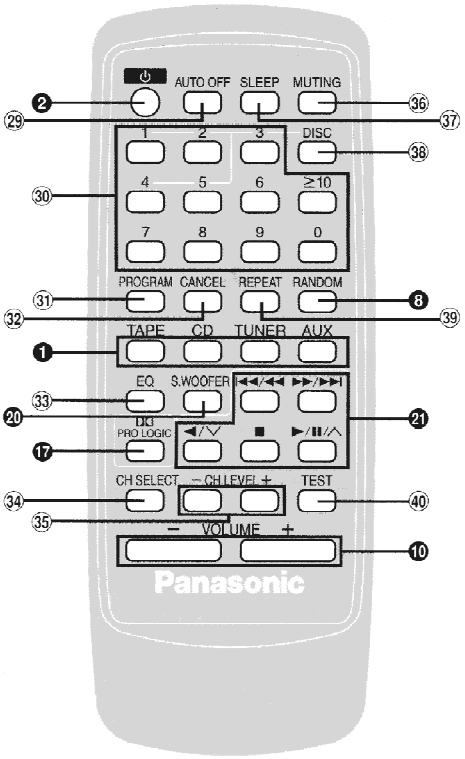
No.	Name
①	**Input select buttons and indicators (CD, TUNER BAND, TAPE DECK 1/2, AUX)**
②	**Standby/on switch (⏻/I , POWER)** Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
③	**AC supply indicator (AC IN)** This indicator lights when the unit is connected to the AC mains supply.
④	**ECO mode button (MODE)**
⑤	**CD manager button (CD MANAGER)**
⑥	**Disc tray**
⑦	**Disc select, disc tray open/close buttons (CD 1-CD 5 CD DIRECT PLAY, ≜ OPEN)**
⑧	**Random play button (RANDOM)**
⑨	**Display select/demonstration button (-DISPLAY/–DEMO)**
⑩	**Volume control (VOLUME)**
⑪	**Headphones jack (PHONES)**
⑫	**Deck 1 cassette holder**
⑬	**Deck 2 cassette holder**



Center console

⑭	**Play timer/record timer button and indicator (◴PLAY/ ◴REC)**
⑮	**Clock/timer button (CLOCK/TIMER)**
⑯	**3D AI lamp (3D AI)**
⑰	**DOLBY PRO LOGIC on/off button and indicator (□□ PRO LOGIC)**
⑱	**Display**
⑲	**Jog control (SOUND CONTROL JOG)**
⑳	**Super woofer on/off button and indicator (S.WOOFER)**
㉑	**Basic operating buttons** Functions change according to the source.
㉒	**Deck 1 open button (≜ DECK 1 OPEN)**
㉓	**Tape edit button (TAPE EDIT)**
㉔	**Recording start/stop button (●REC/STOP)**
㉕	**Reverse mode select button (REV MODE)**
㉖	**Deck 2 open button (≜ DECK 2 OPEN)**
㉗	**Joy stick (◀, ▶, ▼, ▲)**
㉘	**3D AI EQ button (3D AI EQ)**

7. Location of Controls for Remote Control Transmitter



Remote control

Buttons such as ❷ function is exactly the same way as the buttons on the main unit.

No.	Name
❷	Standby/on button (⏻)
㉙	Auto power-off (AUTO OFF)
㉚	Numeric buttons (≥10, 1– 0)
㉛	Program button (PROGRAM)
㉜	Cancel button (CANCEL)
❶	Input select buttons (TAPE, CD, TUNER, AUX)
㉝	EQ select button (EQ)
⑳	Super woofer on/off button (S.WOOFER)
⑰	DOLBY PRO LOGIC on/off button (◻◻ PRO LOGIC)
㉞	Channel select button (CH SELECT)
㉟	Channel level select button (– CH LEVEL +)
㊱	Muting button (MUTING)
㊲	Sleep button (SLEEP)
㊳	Disc button (DISC)
❽	Random button (RANDOM)
㊴	Repeat button (REPEAT)
㉑	Reverse side playback/preset channel select button (◄/∨)
㉑	Skip/search buttons (⏮/◄◄ , ►►/⏭)
㉑	Play/pause/preset channel select button (►/II/∧)
㉑	Stop button (■)
㊵	Test signal output button (TEST)
❿	Volume buttons (– VOLUME +)

8. Operation Checks and Component Replacement Procedures

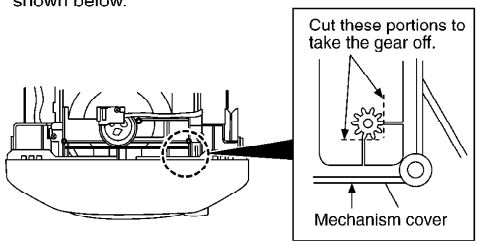
- This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.

- For reassembly after operation checks or replacement, reverse the respective procedures. Special reassembly procedures are described only when required.

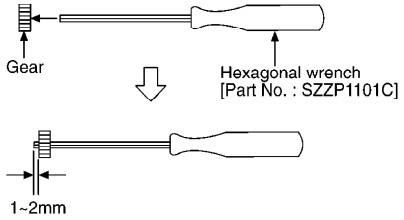
Gear for servicing (as jig) information

1. This unit has a gear which used for checking items (Open/close of disc tray, up/down operation of traverse unit by manually) when servicing. (For gear information, that is described on the items for disassembly procedures.)
2. For preparation of gear (for servicing), perform the procedures as follows.
3. In case of re-servicing the same set, the "gear for servicing" may be took off because it had been used. So, the "gear for servicing" must be stored.

1. Remove the gear provided with mechanism cover as shown below.

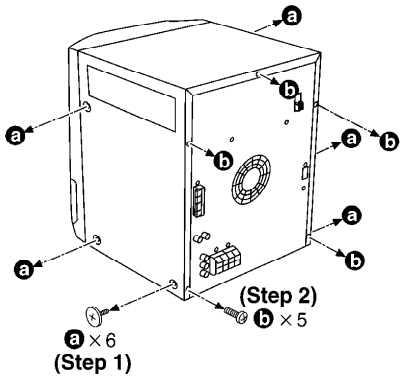


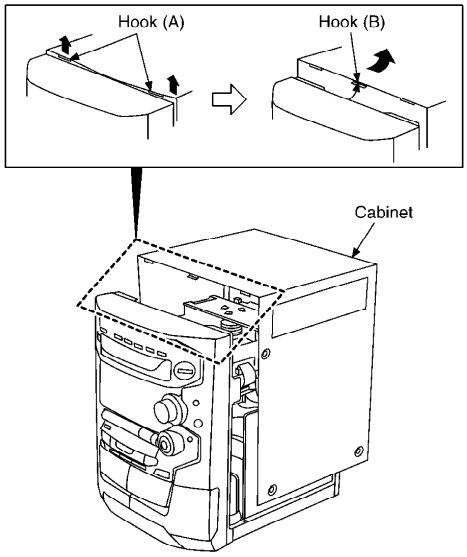
2. Insert the hexagonal wrench (2mm) into the gear, and then project the tip of wrench for 1~2mm length.



(Preparation of gear as jig is completed.)

8.1. Checking for the main P.C.B.

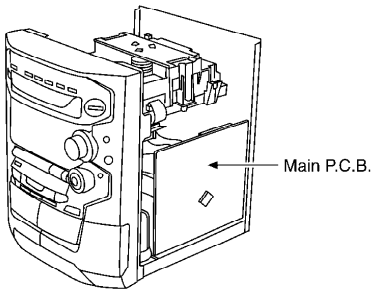




(Step 3)
Lift up the both sides of cabinet ass'y to release the hooks (A). Then, pull the cabinet ass'y toward the rear and release the hook (B) to remove the cabinet ass'y.

NOTE:
When installing the cabinet ass'y, take care not to damage the front cabinet ass'y from hook (B).

- Check the main P.C.B. as shown below.



8.2. Disassembly for the CD changer ass'y

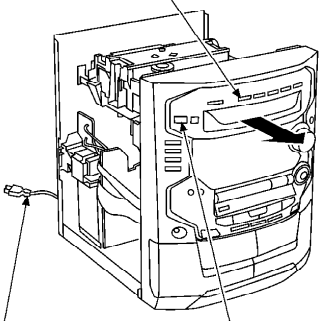
(The CD changer unit can be removed until the tray base / ornament would removed.)

8.2.1. Disassembly for the disc tray ornament

- Follow the (Step 1) - (Step 3) of item 8.1.

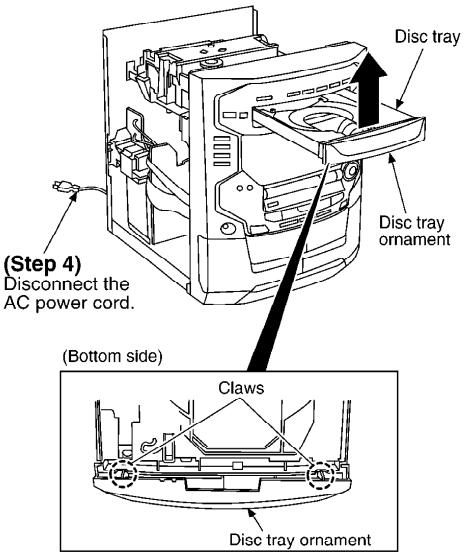
When opening the disc tray automatically

(Step 3)
Push the open / close button 1, so the disc tray will be open automatically.
(If the other buttons would be pushed, disc tray would be open.)



(Step 1)
Connect the AC power cord.

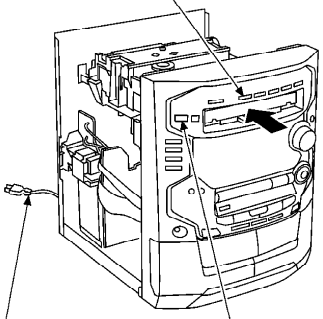
(Step 2)
Push the button and the power turns ON.



(Step 4)
Disconnect the AC power cord.

(Step 5)
Release the 2 claws, and then remove the disc tray ornament.

(Step 8)
Push the open / close button 1, so the disc tray will be close.

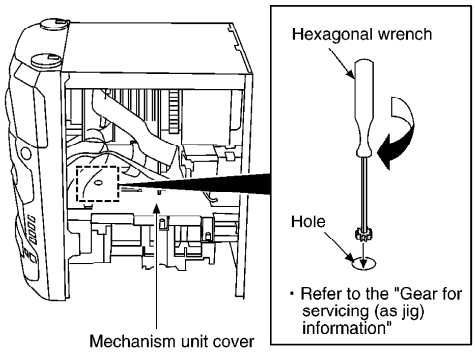


(Step 6)
Connect the AC power cord.

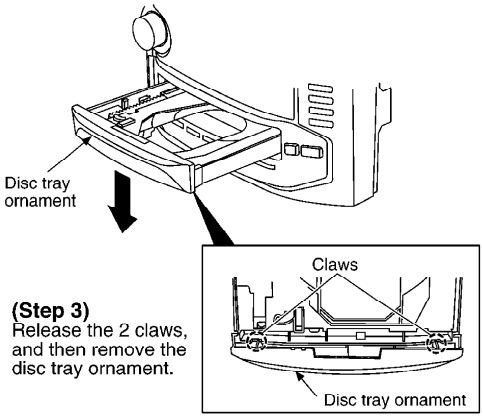
(Step 7)
Push the button and the power turns ON.

When opening the disc tray manually

(Step 1)
Upset the unit.

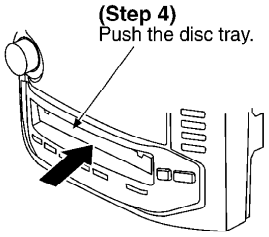


(Step 2)
Insert the gear for servicing into the bottom hole of mechanism unit cover, and then rotate the hexagonal wrench in the direction of arrow. So, the disc tray will be open.



(Step 3)
Release the 2 claws, and then remove the disc tray ornament.

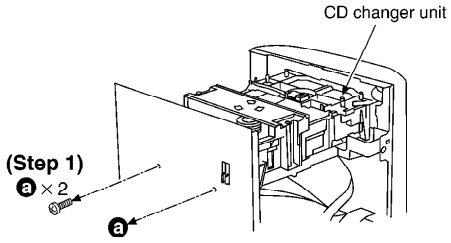
(Bottom side)

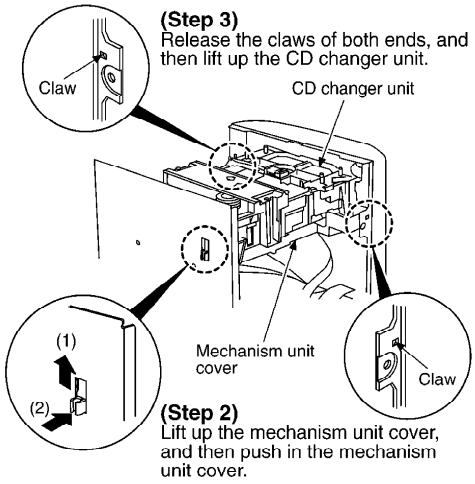


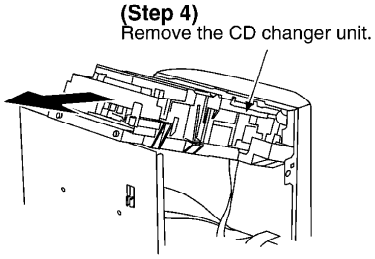
8.2.2. Disassembly for the CD changer unit

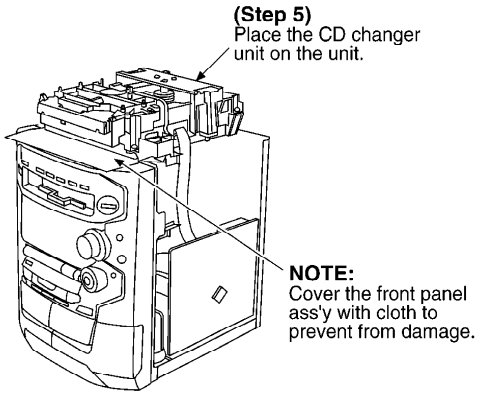
- Follow the (Step 1) - (Step 3) of item 8.1.

- Follow the disassembly instruction for the disc tray / ornament of item 8.2.1.




(Step 3)
Release the claws of both ends, and then lift up the CD changer unit.
Claw
CD changer unit
(1)
(2)
Mechanism unit cover
Claw
(Step 2)
Lift up the mechanism unit cover, and then push in the mechanism unit cover.





〈 The preparation of checking procedures in operational condition is completed. 〉

8.3. Checking for the unit operational condition

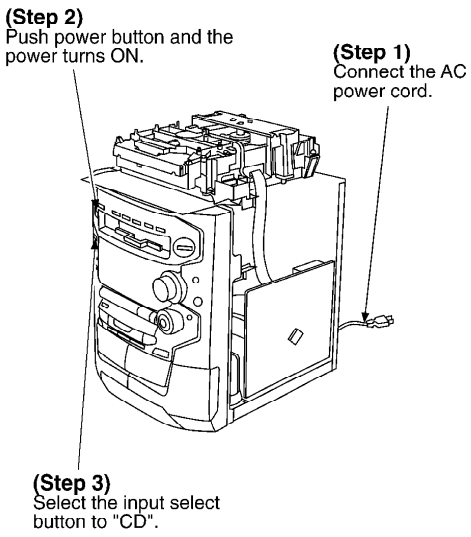
(Place the unit horizontally when loading the CD changer unit.)

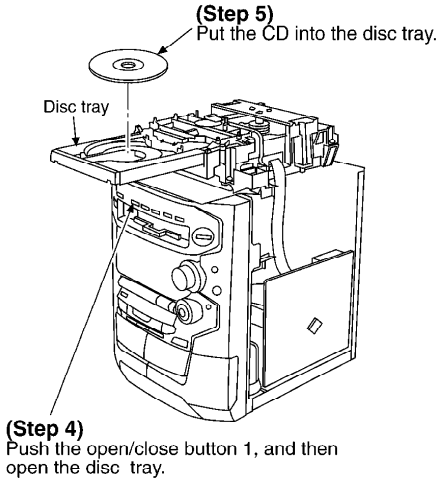
8.3.1. Initial setting of CD unit

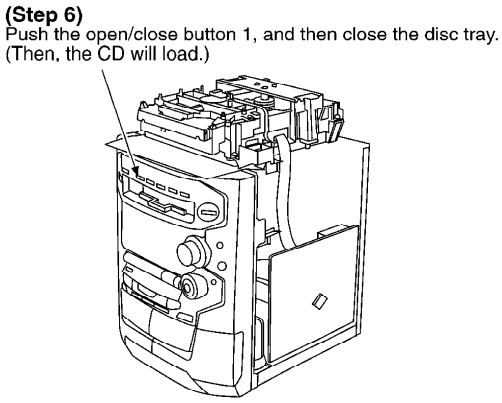
- Follow the (Step 1) - (Step 3) of item 8.1.

- Follow the disassembly instruction for the disc tray / ornament of item 8.2.1.

- Follow the disassembly instruction for the CD changer / unit of item 8.2.2.



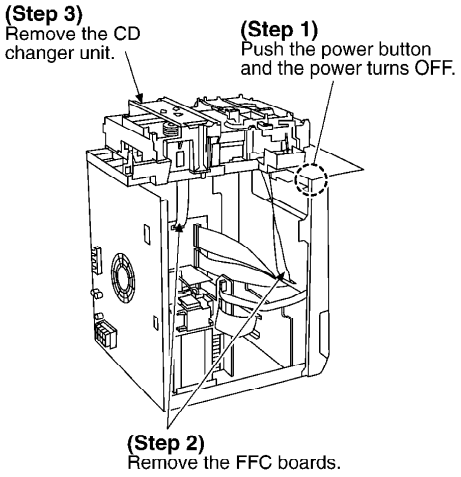


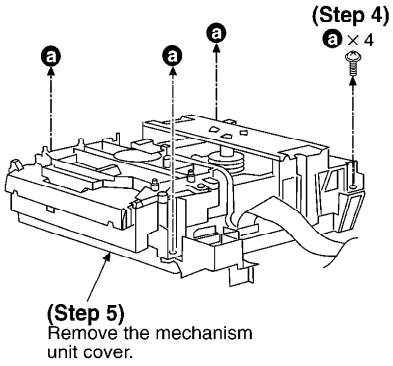


〈**The initial setting of CD unit is completed.**〉

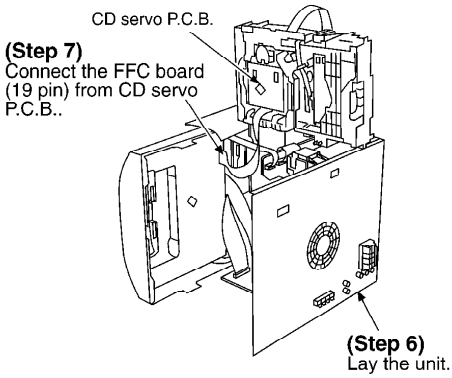
8.3.2. Checking for the CD servo P.C.B.

- The initial setting of CD unit must be completed. / (Refer to the initial setting of CD unit in item 8.3.1.)



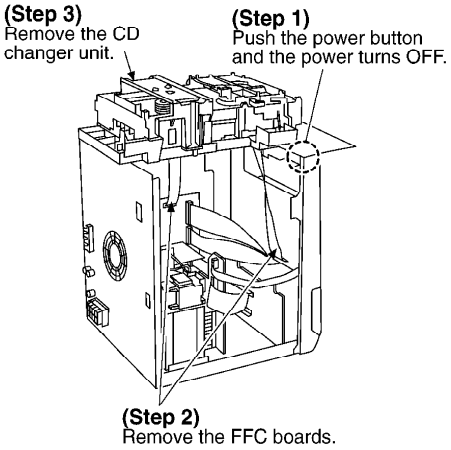


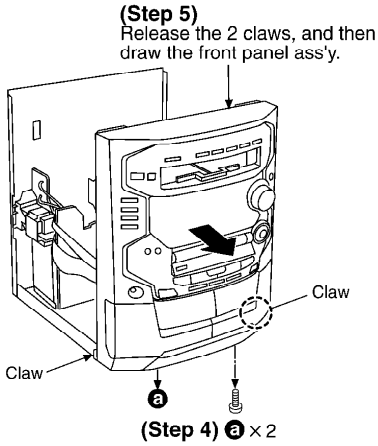
- Check the CD servo P.C.B. as shown below.



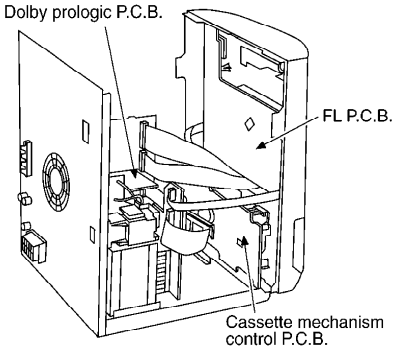
8.3.3. Checking for the dolby prologic P.C.B. FL P.C.B. and cassette mechanism control P.C.B.

- The initial setting of CD unit must be completed. / (Refer to the initial setting of CD unit in item 8.3.1.)



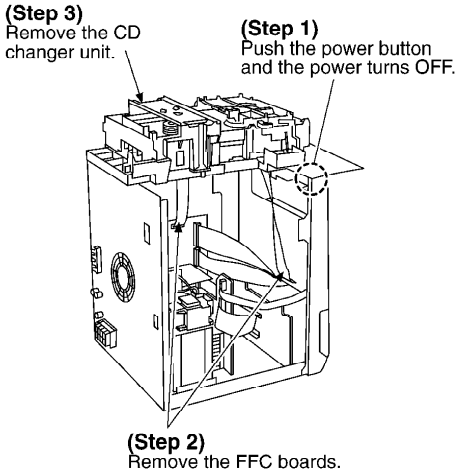


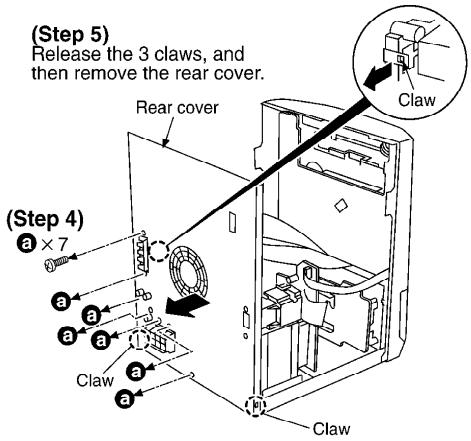
- Check the dolby proloogic P.C.B. FL P.C.B. and / cassette mechanism control P.C.B. as shown below.

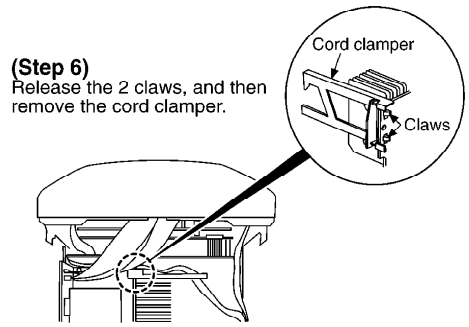


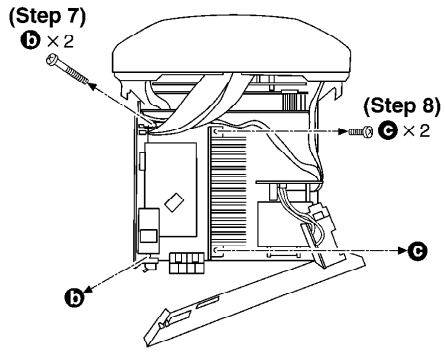
8.3.4. Checking for the power supply P.C.B.

- The initial setting of CD unit must be completed. / (Refer to the initial setting of CD unit in item 8.3.1.)

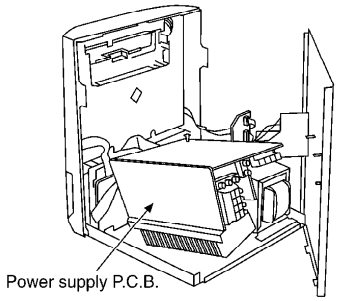








- Check the power supply P.C.B. as shown below.

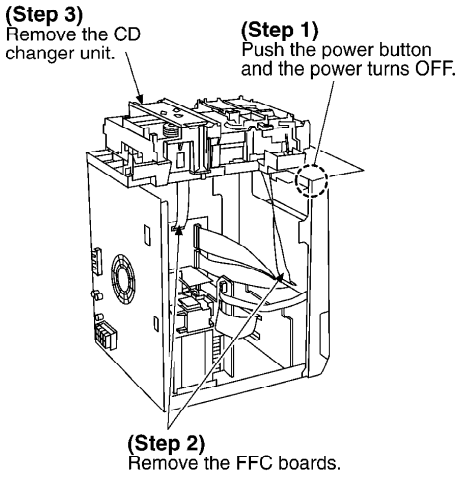


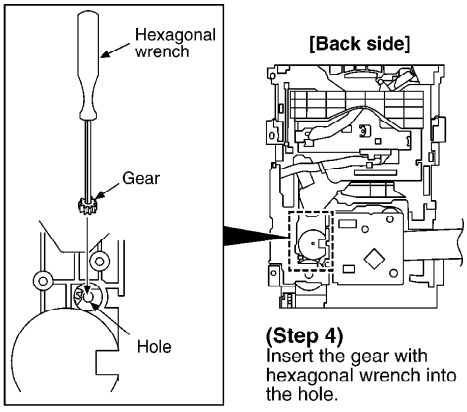
8.4. Replacement for the traverse deck ass'y

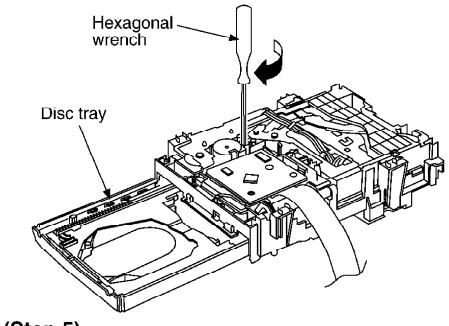
- Follow the (Step 1) - (Step 3) of item 8.1.

- Follow the disassembly instruction for the disc tray / ornament of item 8.2.1.

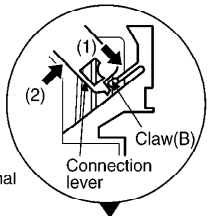
- Follow the disassembly instruction for the CD changer / unit of item 8.2.2.



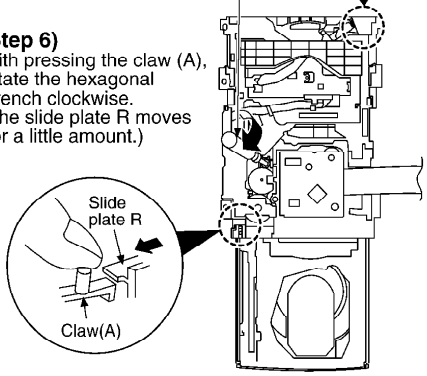



Hexagonal wrench
Disc tray
(Step 5)
Rotate the hexagonal wrench in the direction of arrow (clockwise), and then open the disc tray fully.

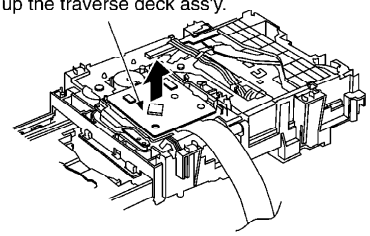
(Step 7)
Pressing the claw (B) in the direction of arrow (1), the connection lever moves in the direction of arrow (2).



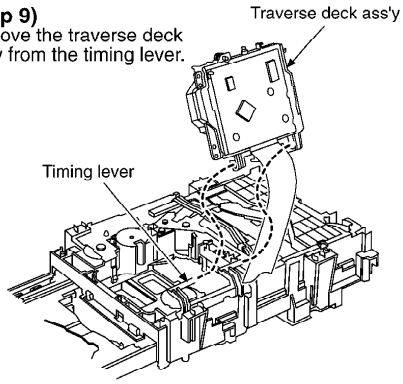
(Step 6)
With pressing the claw (A), rotate the hexagonal wrench clockwise. (The slide plate R moves for a little amount.)



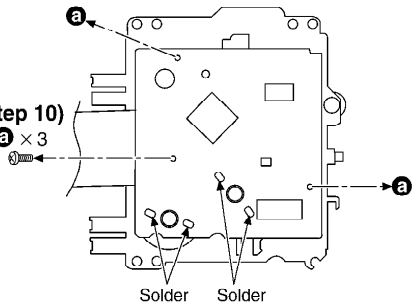
(Step 8)
Lift up the traverse deck ass'y.



(Step 9)
Remove the traverse deck ass'y from the timing lever.

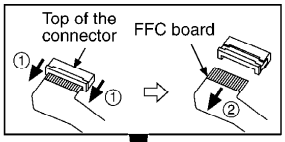


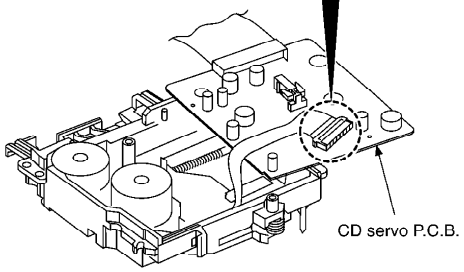
(Step 10)
ⓐ × 3



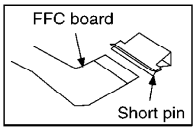
(Step 11)
Unsolder the motor terminals (4 points).

(Step 12)
Remove the FFC board from the connector, and then remove the CD servo P.C.B..

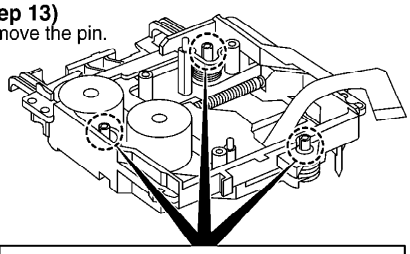


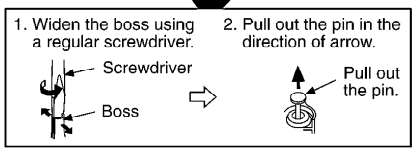


Caution:
Insert a short pin into the traverse unit FFC board.
(Refer to "**Handling Precautions for Traverse Deck**".)

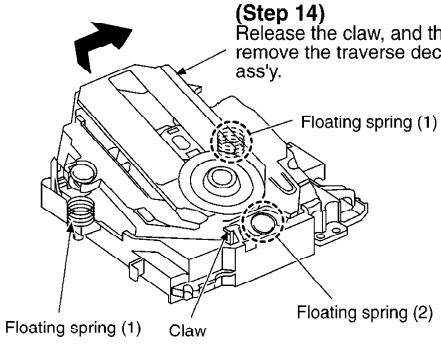


(Step 13)
Remove the pin.



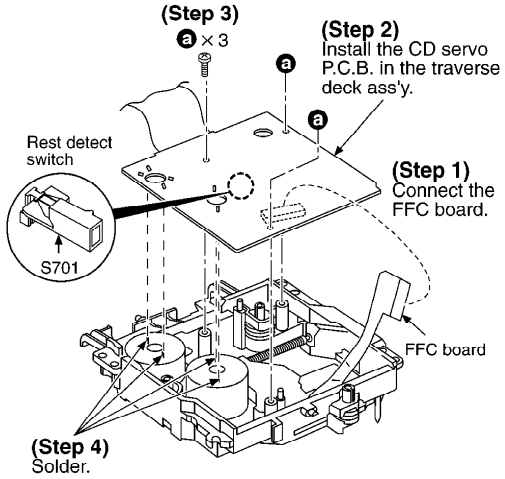

1. Widen the boss using a regular screwdriver.
2. Pull out the pin in the direction of arrow.
Screwdriver
Boss
Pull out the pin.

(Step 14)
Release the claw, and then remove the traverse deck ass'y.



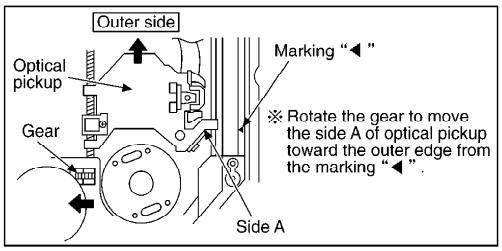
NOTE:
Be careful not to lose the 3 floating springs because those will also be removed on removal of the traverse deck ass'y.

Installation of the CD servo P.C.B. after replacement

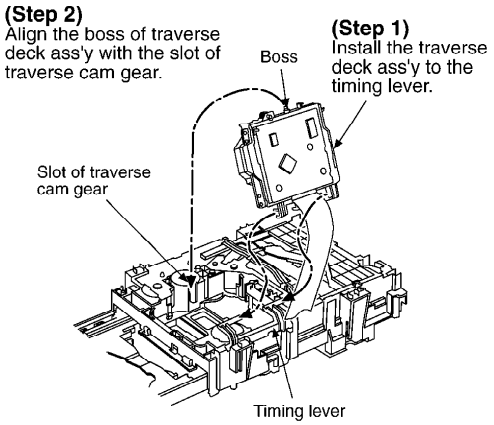


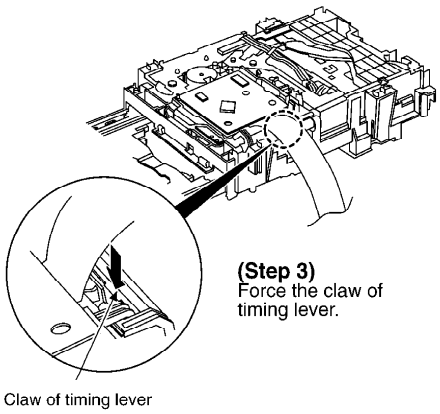
Note for installation of the CD servo P.C.B.

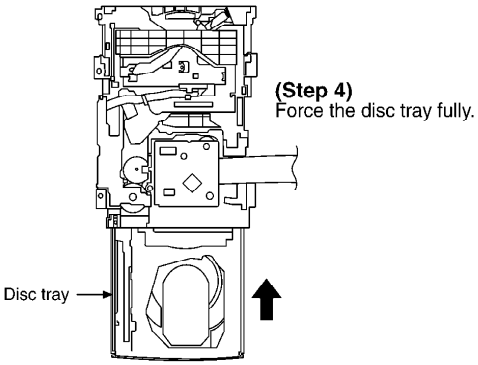
Before installing the CD servo P.C.B., move the optical pickup toward the outer edge from the mark "◀".
[Otherwise, the rest detect switch (S701) mounted on the CD servo P.C.B. may be damaged.]

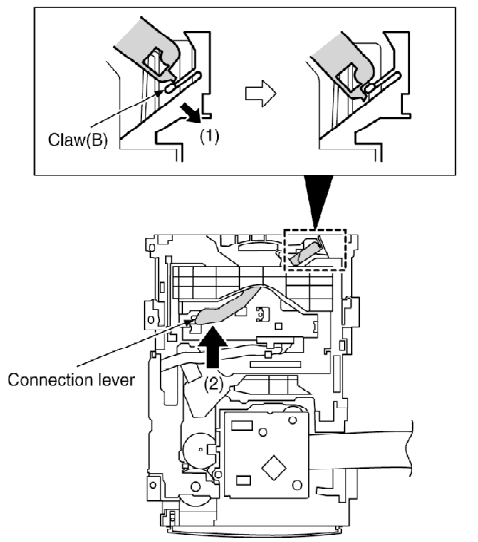

Outer side
Optical pickup
Gear
Marking "◀"
※ Rotate the gear to move the side A of optical pickup toward the outer edge from the marking "◀".
Side A

Installation for traverse deck ass'y


(Step 2)
Align the boss of traverse deck ass'y with the slot of traverse cam gear.
Boss
(Step 1)
Install the traverse deck ass'y to the timing lever.
Slot of traverse cam gear
Timing lever







(Step 5)
With pressing the claw (B) in the direction of arrow (1), force the connection lever in the direction of arrow (2).

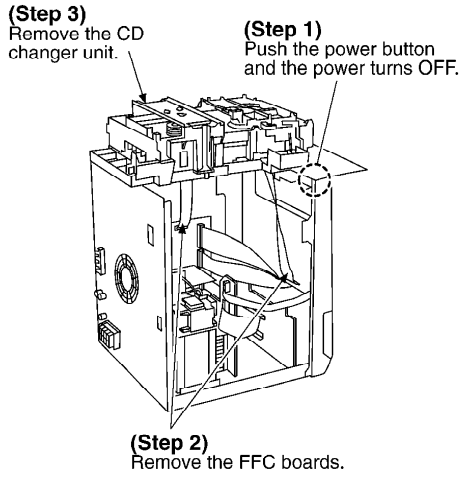
8.5. Replacement for the disc tray

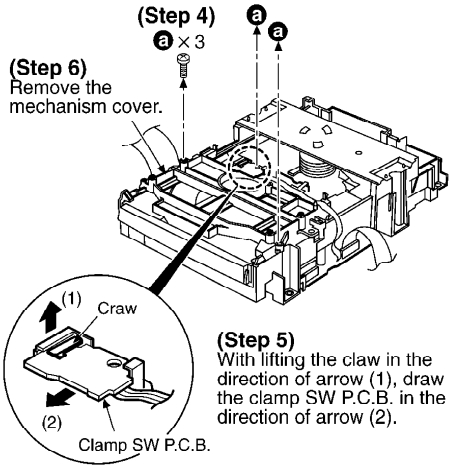
- Follow the (Step 1) - (Step 3) of item 8.1.

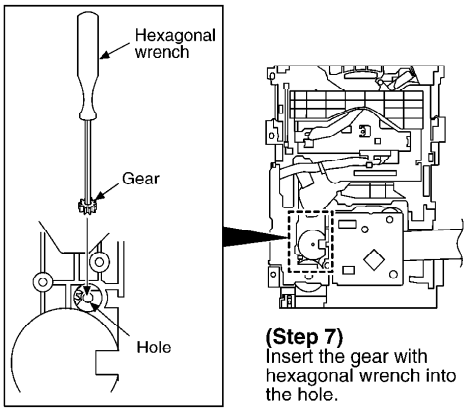
- Follow the disassembly instruction for the disc tray / ornament of item 8.2.1.

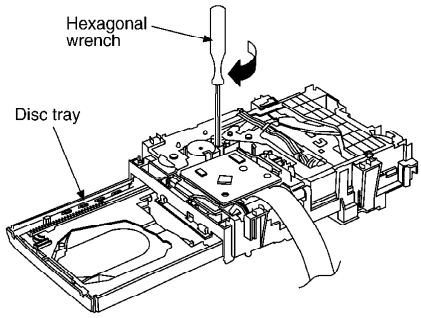
- Follow the disassembly instruction for the CD changer / unit of

item 8.2.2.


(Step 3)
Remove the CD changer unit.
(Step 1)
Push the power button and the power turns OFF.
(Step 2)
Remove the FFC boards.

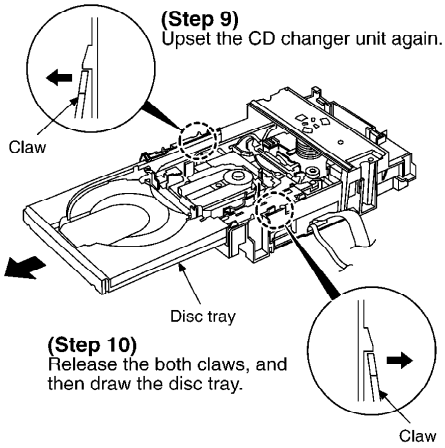

(Step 4)
a × 3
(Step 6)
Remove the mechanism cover.
(1)
Craw
(2)
Clamp SW P.C.B.
(Step 5)
With lifting the claw in the direction of arrow (1), draw the clamp SW P.C.B. in the direction of arrow (2).


Hexagonal wrench
Gear
Hole
(Step 7)
Insert the gear with hexagonal wrench into the hole.

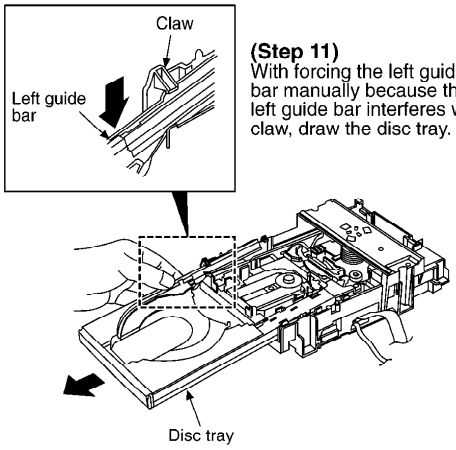


(Step 8)
Rotate the hexagonal wrench in the direction of arrow (clockwise), and then open the disc tray fully.

(Step 9)
Upset the CD changer unit again.



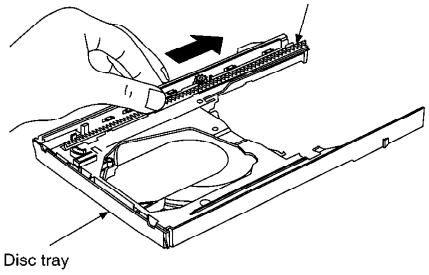
(Step 10)
Release the both claws, and then draw the disc tray.

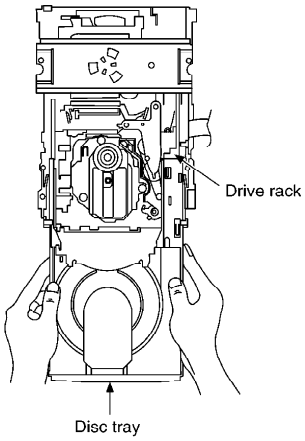


(Step 11)
With forcing the left guide bar manually because the left guide bar interferes with claw, draw the disc tray.

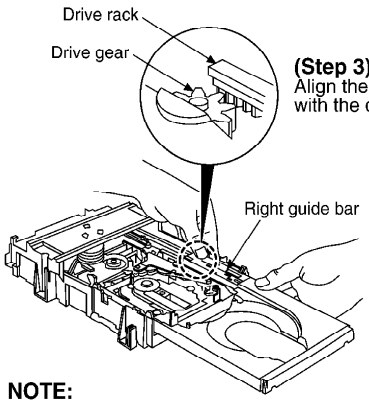
Installation of the disc tray after replacement

(Step 1)
Slide the drive rack fully in the direction of arrow.





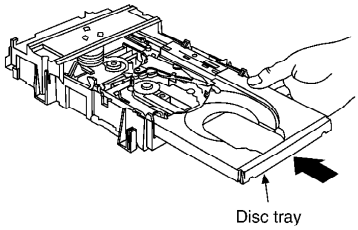
(Step 2)
Holding the drive rack not to move, install the disc tray.



(Step 3)
Align the drive rack with the drive gear.

NOTE:
Force the right guide bar of tray base manually not to move upwards.

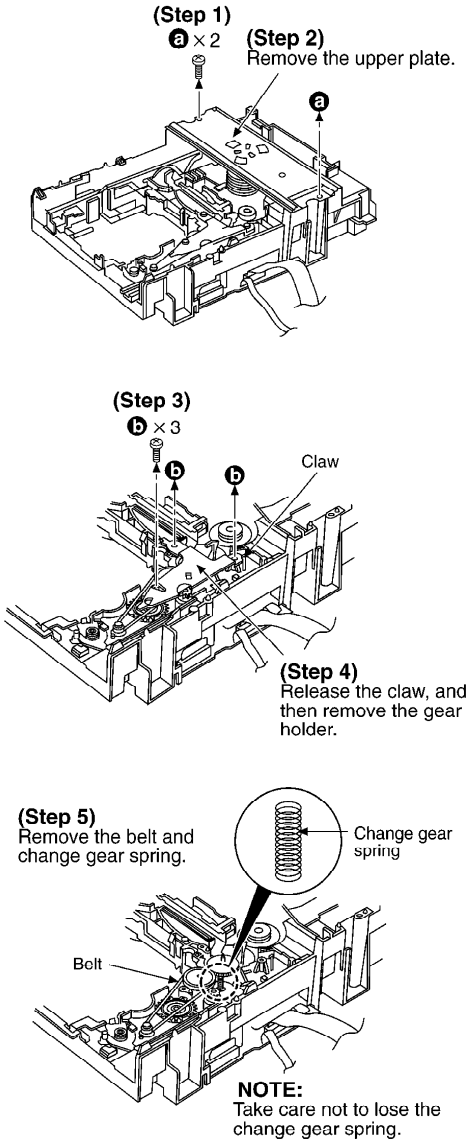
(Step 4)
Holding the drive rack manually, push the disc tray in the direction of arrow.



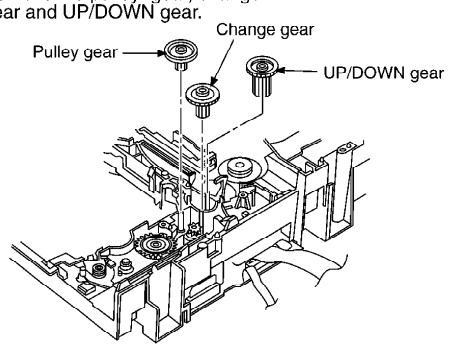
8.6. Disassembly and reassembly for mechanism base drive unit

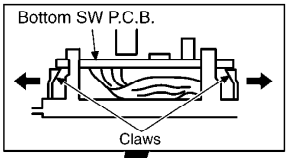
Disassembly for mechanism base drive unit

- Follow the (Step 1) - (Step 11) of item 8.1.
- Follow the disassembly instruction for the disc tray / ornament of item 8.2.1.
- Follow the disassembly instruction for the CD changer / unit of item 8.2.2.
- Follow the (Step 1) - (Step 9) of item 8.4.
- Follow the (Step 1) - (Step 11) of item 8.5.



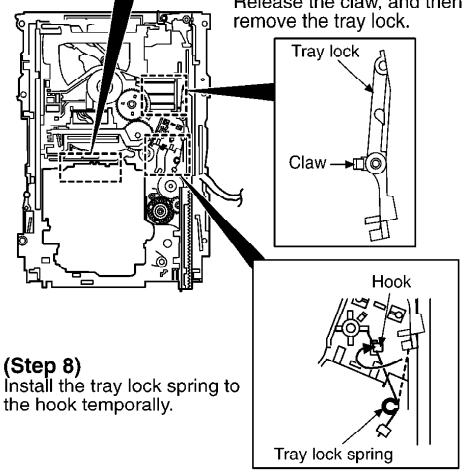
(Step 6)
Remove the pulley gear, change gear and UP/DOWN gear.





(Step 7)
Release the 2 claws, and then remove the bottom SW P.C.B..

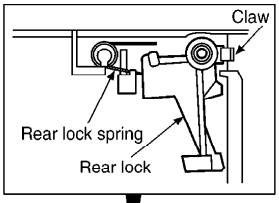
(Step 9)
Release the claw, and then remove the tray lock.

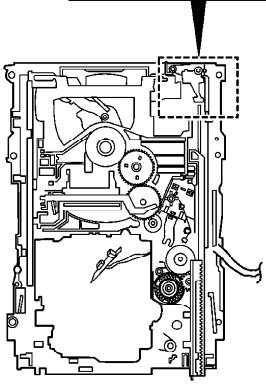


(Step 8)
Install the tray lock spring to the hook temporally.

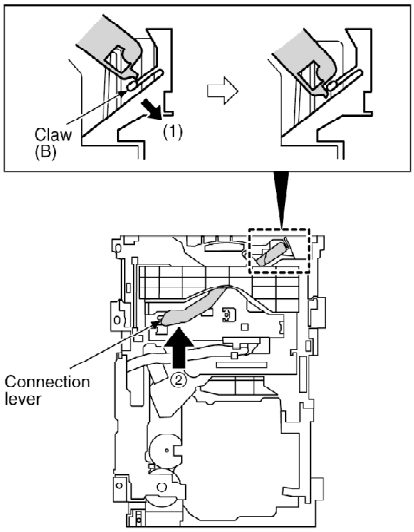
(Step 10)
Release the claw, and then remove the rear lock.

NOTE:
Take care not take the rear lock spring off.

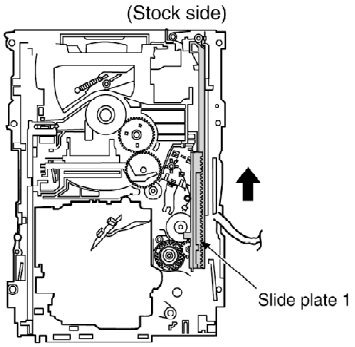




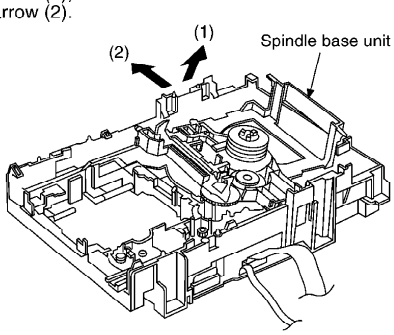
(Step 11)
Pressing the claw (B) in the direction of arrow (1), force the connection lever in the direction of arrow (2).

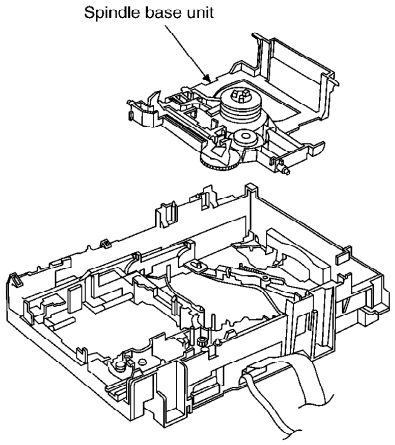


(Step 12)
Move the slide plate 1 to the end of stock side.

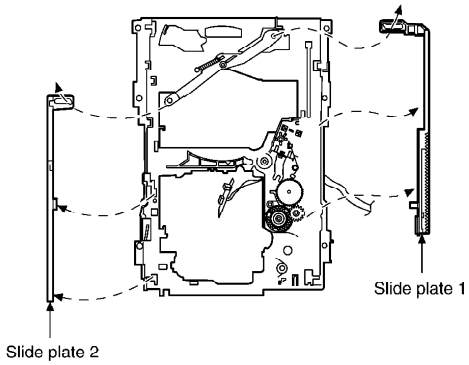


(Step 13)
Lift up the left end of spindle base unit in the direction of arrow (1), and then remove the unit in the direction of arrow (2).

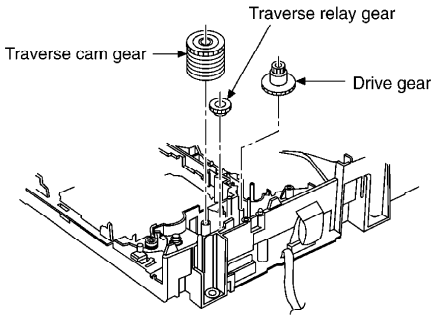




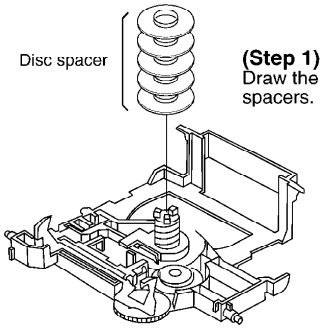
(Step 14)
Remove the slide plate 1 and slide plate 2.



(Step 15)
Remove the traverse relay gear,
traverse cam gear and drive gear.

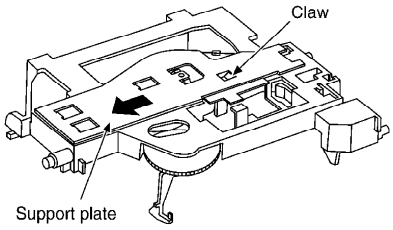


Diassembly/reassembly for the spindle base unit

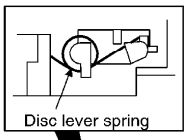


(Step 1)
Draw the 5 disc spacers.

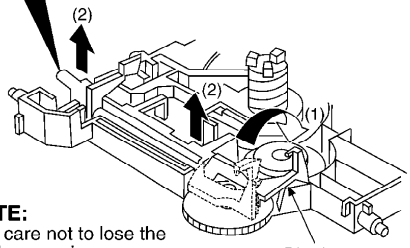
(Step 2)
Pushing the claw, slide the support plate in the direction of arrow, and then remove it.



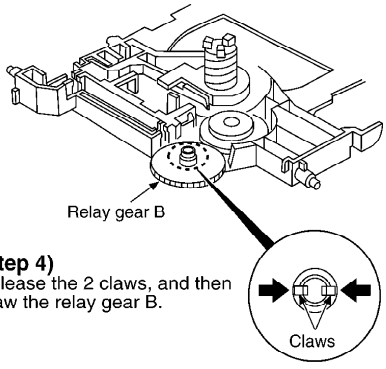
(Installation for disc lever spring)



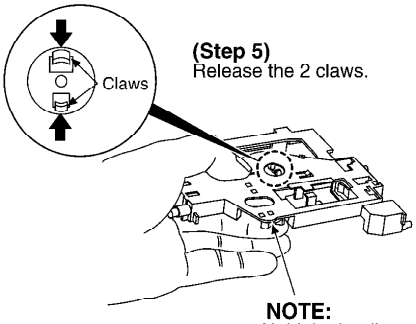
(Step 3)
Rotate the disc lever in the direction of arrow (1), draw the disc lever.



NOTE:
Take care not to lose the disc lever spring.

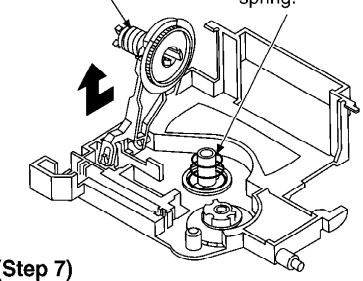


(Step 4)
Release the 2 claws, and then draw the relay gear B.



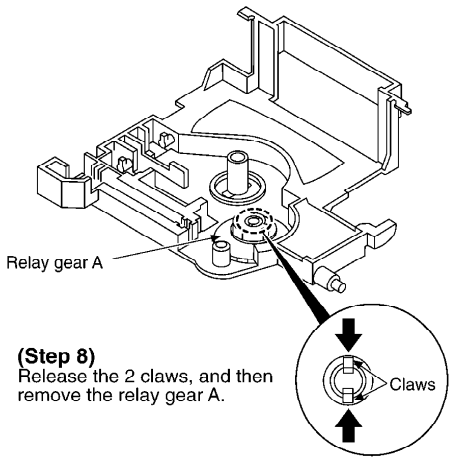
(Step 5)
Release the 2 claws.

NOTE:
Hold the loading stopper ass'y manually because it is flipped by spring.



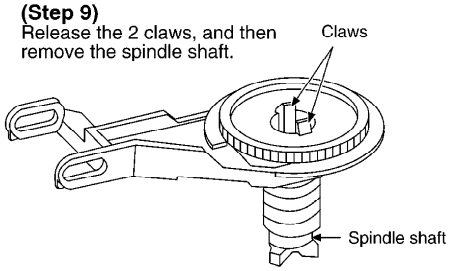
(Step 6)
Remove the cushion spring.

(Step 7)
Remove the loading stopper ass'y in the direction of arrow.

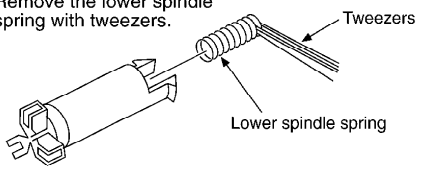


(Step 8)
Release the 2 claws, and then remove the relay gear A.

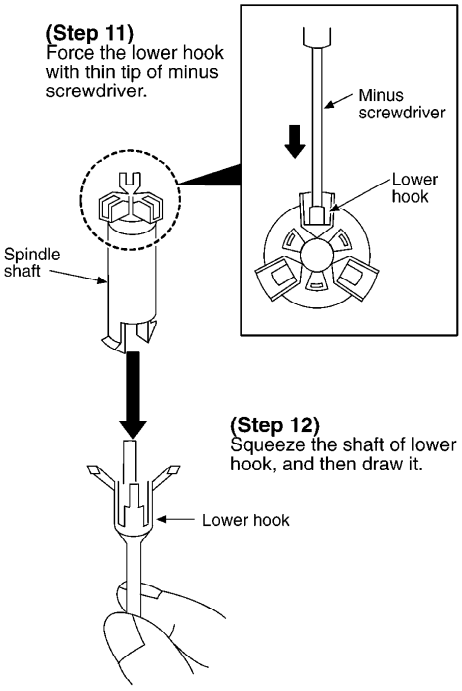
(Step 9)
Release the 2 claws, and then remove the spindle shaft.



(Step 10)
Remove the lower spindle spring with tweezers.

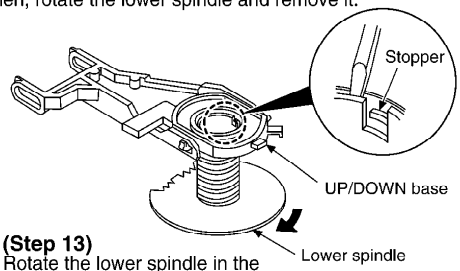


(Step 11)
Force the lower hook with thin tip of minus screwdriver.

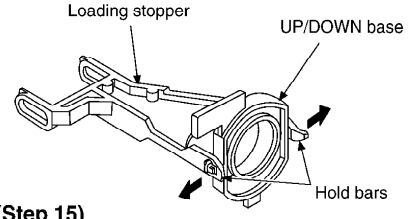


(Step 12)
Squeeze the shaft of lower hook, and then draw it.

(Step 14)
Insert the thin tip of minus screwdriver between the lower spindle and UP/DOWN base, and then slacken the lower spindle to release the stopper.
Then, rotate the lower spindle and remove it.



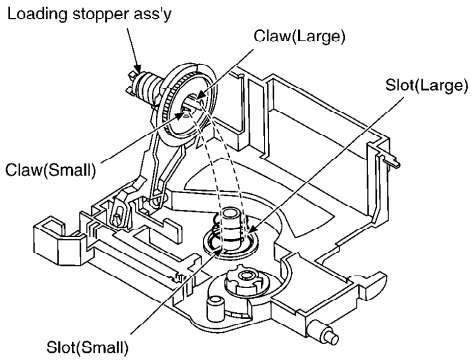
(Step 13)
Rotate the lower spindle in the direction of arrow until the lower spindle interferes with stopper.



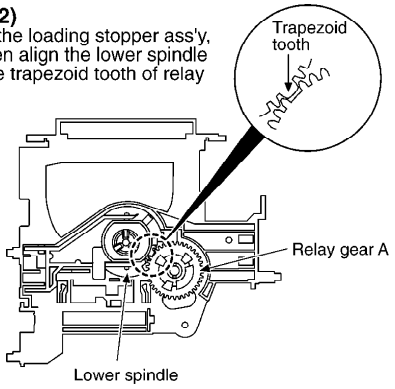
(Step 15)
Rotate the UP/DOWN base at a 90 degree angle. Then, spread the hold bars of loading stopper and remove the UP/DOWN base.

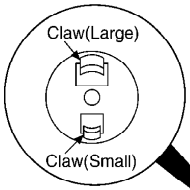
Installation for loading stopper ass'y

(Step 1)
Align the claw of loading stopper ass'y with the slot of spindle base. (Caution should be exercised when alignment of claw due to the size of claws.)

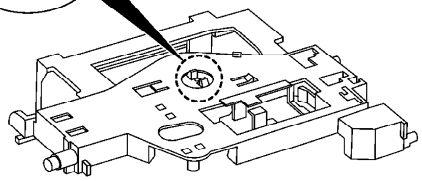


(Step 2)
Lower the loading stopper ass'y, and then align the lower spindle with the trapezoid tooth of relay gear A.

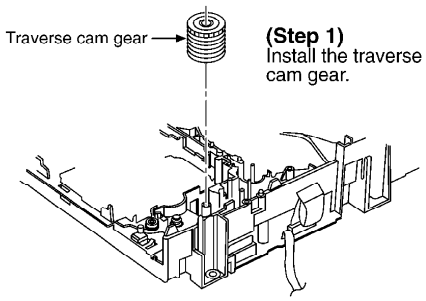




(Step 3)
Force the loading stopper ass'y, latch the claw firmly.

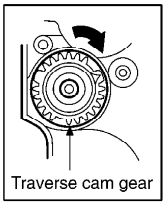


Reassembling for mechanism base drive unit

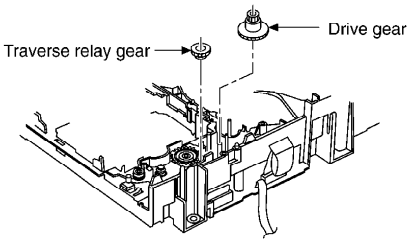


(Step 1)
Install the traverse cam gear.

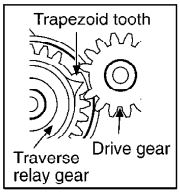
(Step 2)
Rotate the traverse cam gear to the direction of arrow.

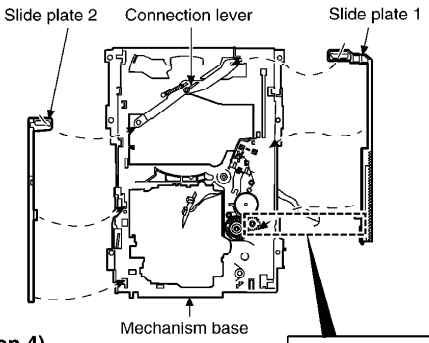


(Step 3)
Install the drive gear and traverse relay gear.



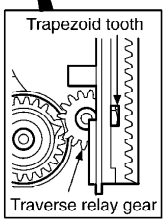
※ When installing the traverse relay gear, align the trapezoid tooth of gear with tooth of drive gear.

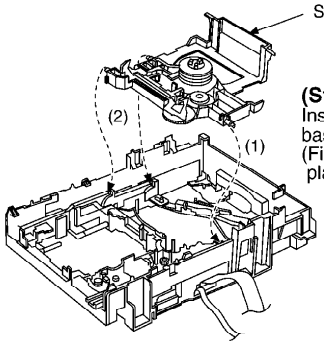




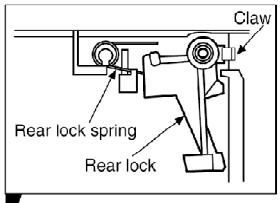
(Step 4)
Install the slide plate 2 to the mechanism base, and then match to the connection lever.

(Step 5)
Install the slide plate 1 to the mechanism base, and then match to the connection lever and align the trapezoid tooth of traverse relay gear with the slide plate 1.

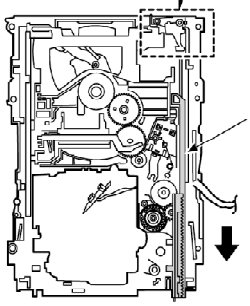




(Step 6)
Install the spindle base unit.
(First, install slide plate 1.)

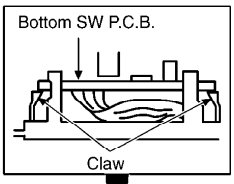


(Step 8)
Install the rear lock.
(The claw should be latched.)



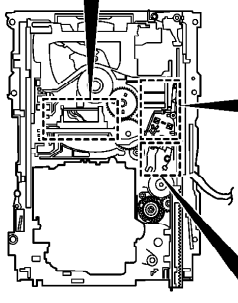
(Step 7)
Move the slide plate 1 to forward fully.

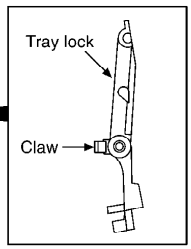
(Front side)

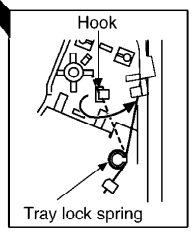


(Step 9)
Install the bottom SW P.C.B..
(The claw should be latched.)

(Step 10)
Install the tray lock.
(The claw should be latched.)

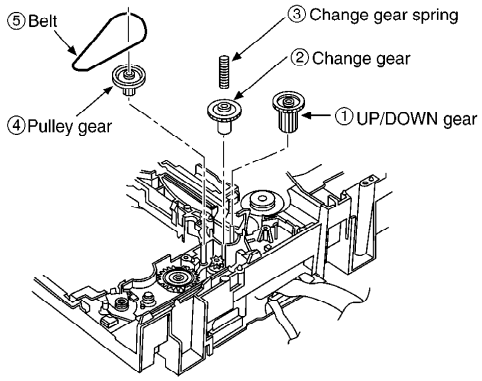




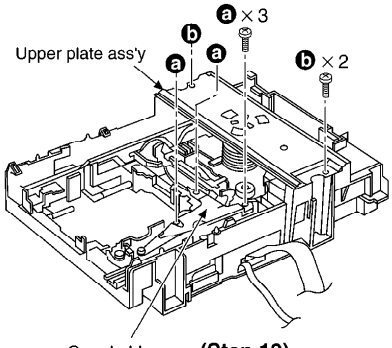


(Step 11)
Remove the tray lock spring from hook, and then latch to the tray lock.

(Step 12)
Install the UP/DOWN gear, change gear, change gear spring, pulley gear and belt in the order of ① - ⑤ .



(Step 14)
Install the upper plate ass'y, and then tighten the screw (ⓑ).



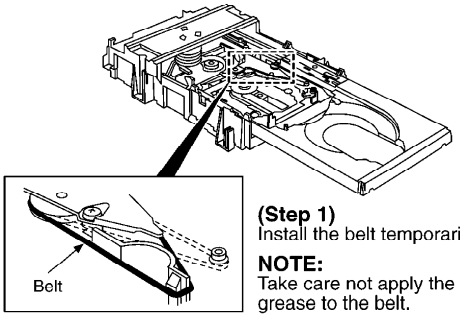
(Step 13)
Install the gear holder, and then tighten the screw (ⓐ).

(Step 15)
Install the tray base, traverse deck ass'y and mechanism cover. (Refer to the items 8.4. and 8.5.)

[Operation check after servicing]
Check the proper operation of following items with gear and hexagonal screwdriver.
1) Open/close of tray base.
2) Moving the tray base to the stock side.
3) UP/DOWN operation of spindle base unit.
4) UP/DOWN operation of traverse unit.

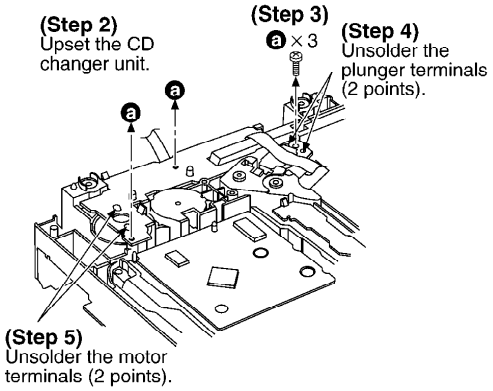
8.7. Replacement for the motor ass'y

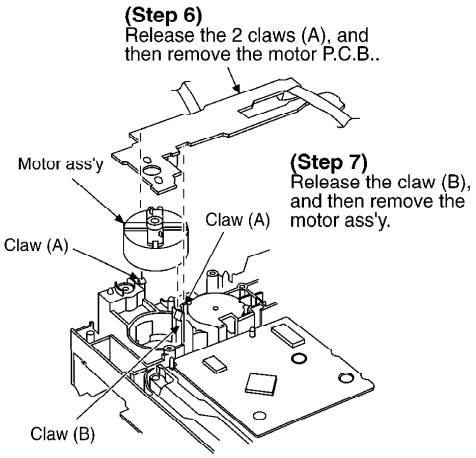
- Follow the (Step 1) - (Step 3) of item 8.1.
- Follow the disassembly instruction for the disc tray / ornament of item 8.2.1.
- Follow the disassembly instruction for the CD changer / unit of item 8.2.2.
- Follow the (Step 1) - (Step 10) of item 8.5.



(Step 1)
Install the belt temporarily.

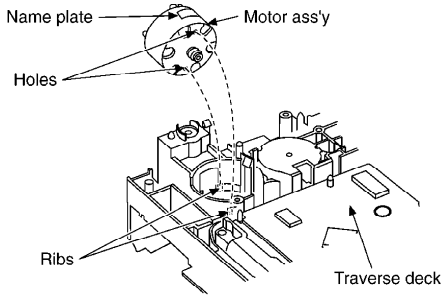
NOTE:
Take care not apply the grease to the belt.




(Step 6)
Release the 2 claws (A), and then remove the motor P.C.B..
Motor ass'y
(Step 7)
Release the claw (B), and then remove the motor ass'y.
Claw (A)
Claw (A)
Claw (B)

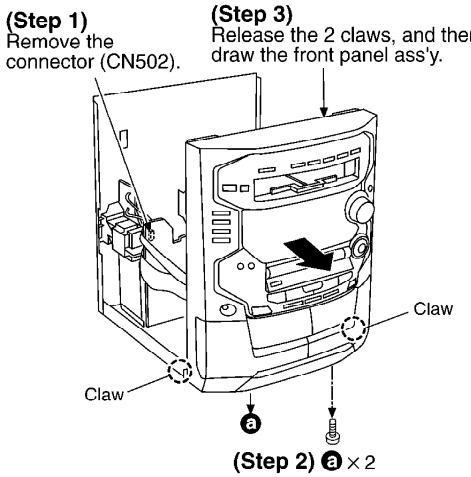
Notice for motor ass'y installation

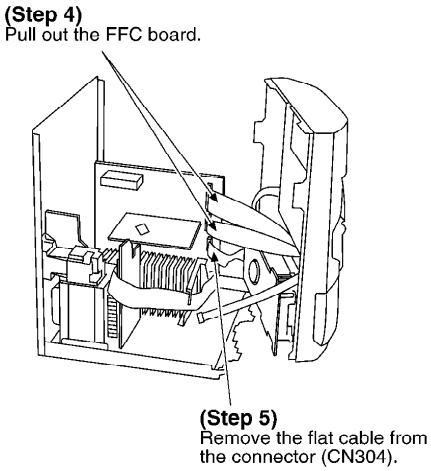
1. Locate the name plate of motor to the traverse deck.
2. Align the hole of motor with the ribs.



8.8. Replacement for the pinch roller ass'y and head block

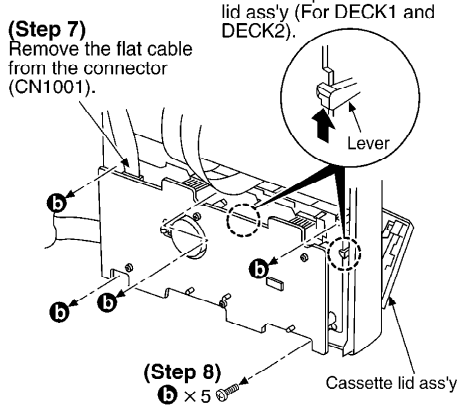
- Follow the (Step 1) - (Step 3) of item 8.1.
- Follow the disassembly instruction for the disc tray / ornament of item 8.2.1.
- Follow the disassembly instruction for the CD changer / unit of item 8.2.2.
- Follow the (Step 1) - (Step 3) of item 8.3.3.



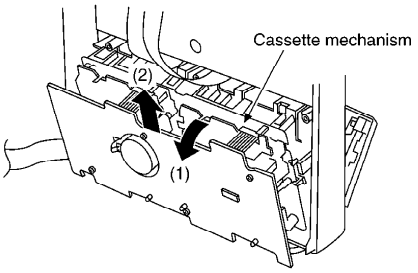


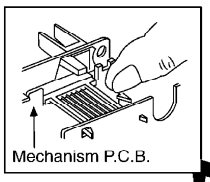
(Step 6)
Push the lever upward, and then open the cassette lid ass'y (For DECK1 and DECK2).

(Step 7)
Remove the flat cable from the connector (CN1001).

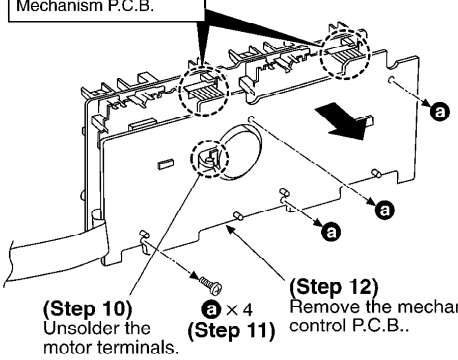


(Step 9)
Tilt the cassette mechanism in the direction of arrow (1), and then remove it in the direction of arrow (2).



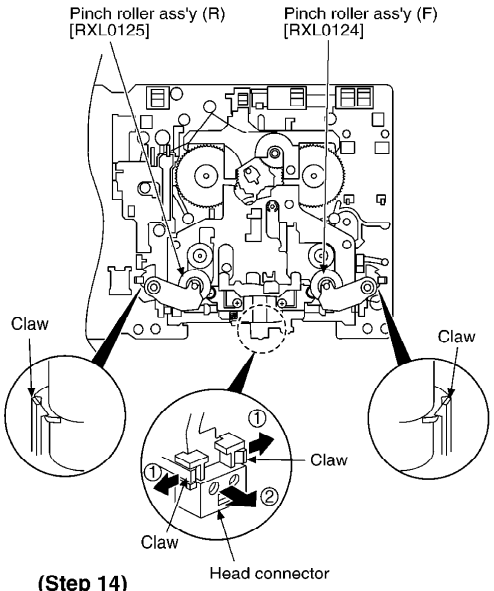


NOTE:
When removing the mechanism control P.C.B., remove it with holding the mechanism P.C.B..

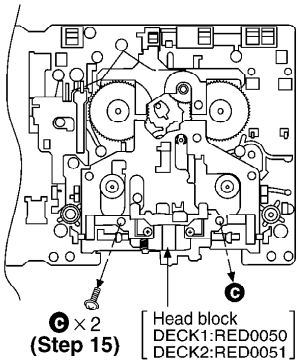


※ The mechanism as shown below is for DECK2.
For the one of DECK1, perform the same procedures.

(Step 13)
Release the 2 claws, and then remove the pinch roller (R), (F).

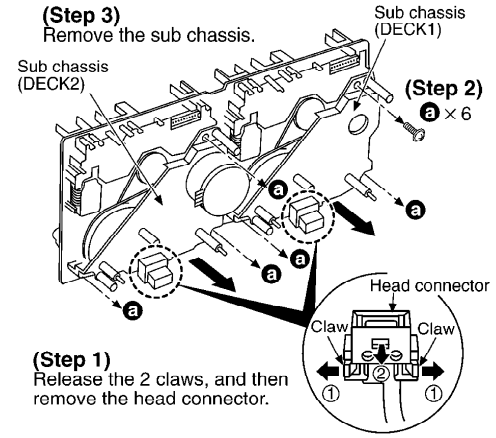


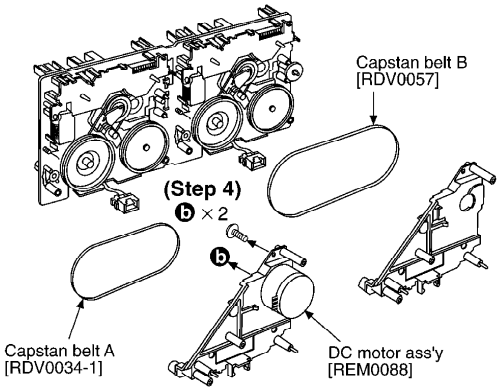
(Step 14)
Release the 2 claws, and then remove the head connector.

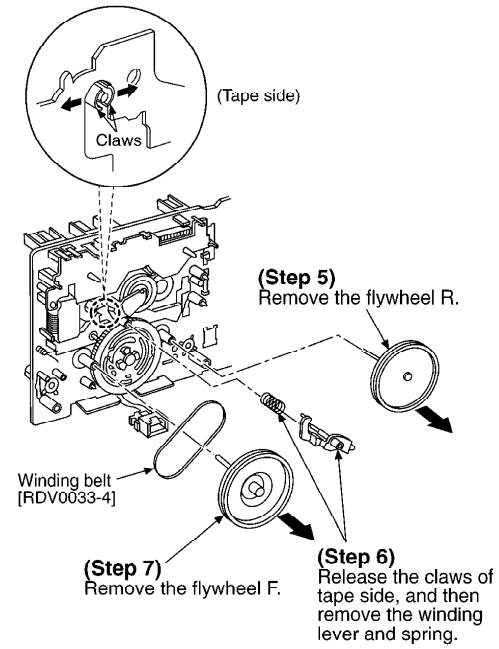


8.9. Replacement for the CD motor ass'y, capstan belt A, capstan belt B and winding belt

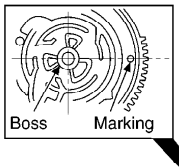
- Follow the (Step 1) - (Step 3) of item 8.1.
- Follow the disassembly instruction for the disc tray / ornament of item 8.2.1.
- Follow the disassembly instruction for the CD changer / unit of item 8.2.2.
- Follow the (Step 1) - (Step 3) of item 8.3.3.
- Follow the (Step 1) - (Step 11) of item 8.8.


(Step 3)
Remove the sub chassis.
Sub chassis
(DECK1)
Sub chassis
(DECK2)
(Step 2)
ⓐ × 6
Head connector
Claw
Claw
(Step 1)
Release the 2 claws, and then
remove the head connector.

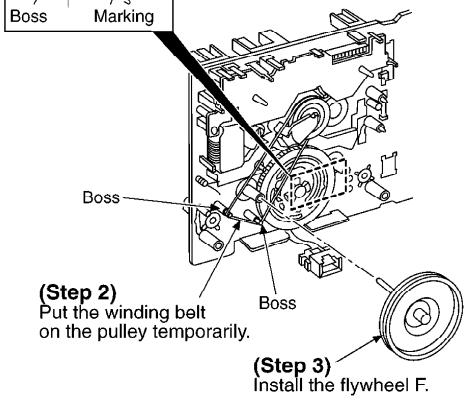

Capstan belt B
[RDV0057]
(Step 4)
ⓑ × 2
Capstan belt A
[RDV0034-1]
DC motor ass'y
[REM0088]


(Tape side)
Claws
(Step 5)
Remove the flywheel R.
Winding belt
[RDV0033-4]
(Step 7)
Remove the flywheel F.
(Step 6)
Release the claws of
tape side, and then
remove the winding
lever and spring.

Installation of the belt

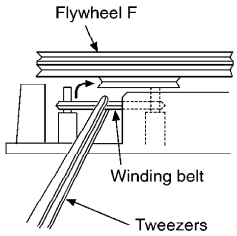


(Step 1)
The boss and marking should be positioned horizontally.

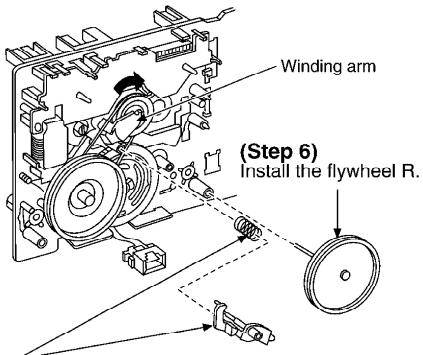


(Step 2)
Put the winding belt on the pulley temporarily.

(Step 3)
Install the flywheel F.



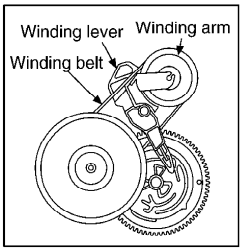
(Step 4)
Put the winding belt on the flywheel F.



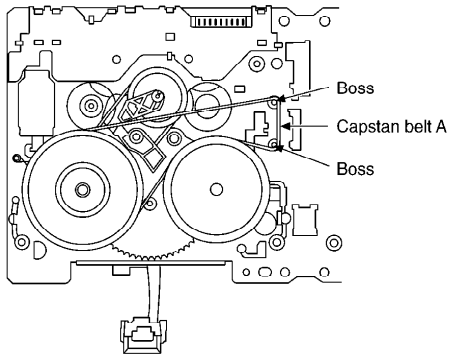
(Step 6)
Install the flywheel R.

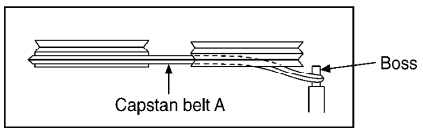
(Step 5)
Install the winding lever and spring while pressing the winding arm in the direction of arrow.
(The winding lever must be inserted completly and latched with claws.)

NOTE:
The winding lever should be positioned as shown below.

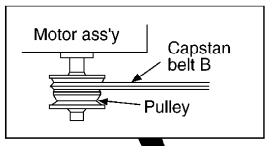


(Step 7)
Put the capstan belt A temporarily as shown below.





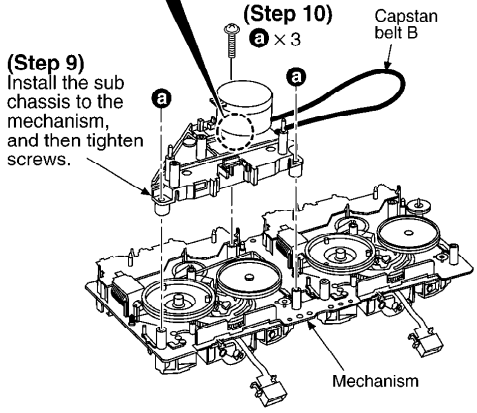
(Side view)

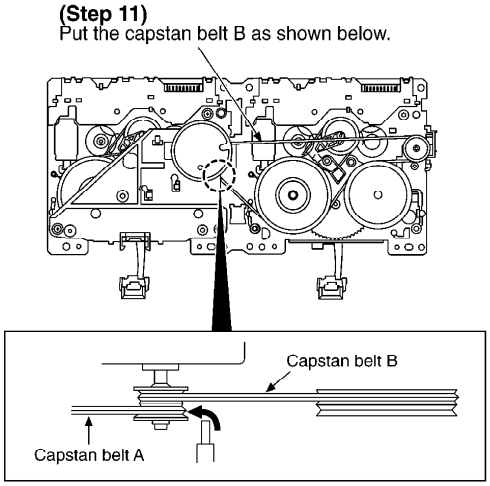


(Step 8)
Put the capstan belt B on the motor ass'y pulley.

(Step 9)
Install the sub chassis to the mechanism, and then tighten screws.

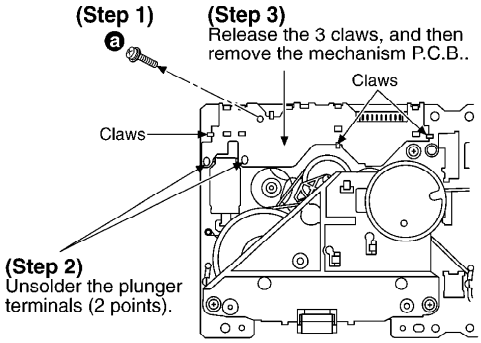
(Step 10)
ⓐ × 3




(Step 11)
Put the capstan belt B as shown below.
Capstan belt B
Capstan belt A
(Step 12)
Put the capstan belt A on the motor ass'y pulley.

8.10. Replacement for the components parts on the mechanism P.C.B.

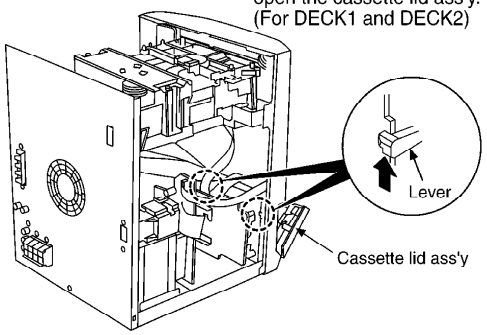
- Follow the (Step 1) - (Step 3) of item 8.1.
- Follow the disassembly instruction for the disc tray / ornament of item 8.2.1.
- Follow the disassembly instruction for the CD changer / unit of item 8.2.2.
- Follow the (Step 1) - (Step 5) of item 8.3.3.
- Follow the (Step 1) - (Step 6) of item 8.8.



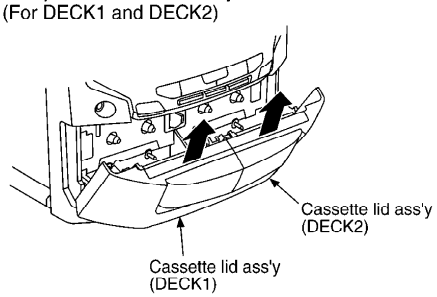
8.11. Replacement for the cassette lid ass'y

- Follow the (Step 1) - (Step 3) of item 8.1.

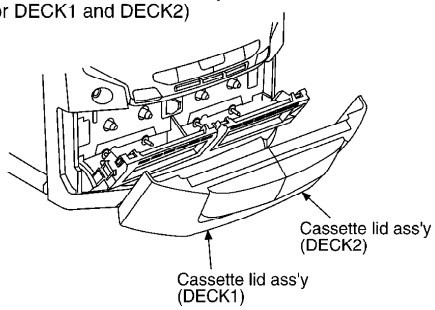
(Step 1)
Force the lever upward,
open the cassette lid ass'y.
(For DECK1 and DECK2)



(Step 2)
Lift up the cassette lid ass'y in the direction of arrow.
(For DECK1 and DECK2)



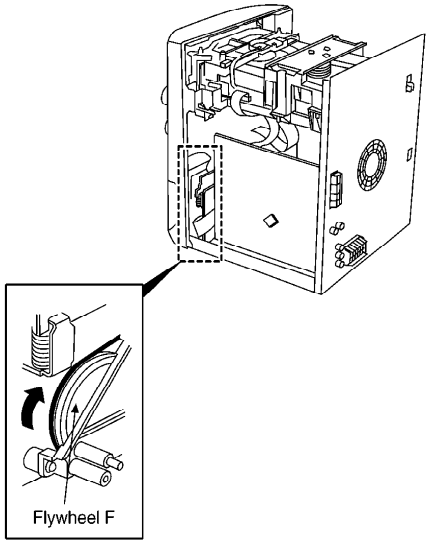
(Step 3)
Remove the cassette lid ass'y.
(For DECK1 and DECK2)



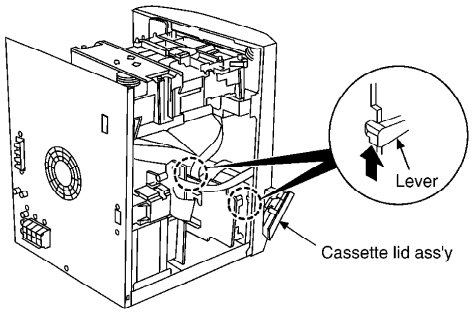
8.12. Measure for tape trouble

- Follow the (Step 1) - (Step 3) of item 8.1.

(Step 1)
If a cassette tape cannot be removed from the deck since the tape is caught by the capstan or pinch roller during playback or recording, rotate the flywheel F in the direction of the arrow to remove the tape.



(Step 2)
Force the lever upward and open the cassette lid ass'y.
Take the cassette tape off.



9. Checking Procedure for Self-operation of Cassette Mechanism Ass'y

- This procedure describes simple methods independent of mechanism controller or governor circuit.

9.1. Operation Check Providing with Cassette Tape

1. Push up the EJECT lever with rubber band.(Refer to Fig. 2)

2. Apply DC 5V to the MOTOR. (MOTOR will be rotated) (Refer to Fig. 1)

3. Provide the cassette tape with mechanism ass'y.

4. Apply DC 9V to the plunger, and then operate it by switching

power ON/OFF. (Power: +PL, -PL) (Refer to Fig. 1)

A. FWD PLAY : Supply power to the plunger momentary. (Duration : approx. 50msec.)

B. FWD FF : At FWD PLAY mode, supply power to the plunger momentary. (Duration: approx. 50msec.)

C. STOP : At FWD FF mode, supply power to the plunger momentary. (Duration: approx. 50msec.)

D. REV PLAY : At STOP mode, supply power to the plunger for ordinary duration. (Duration: approx. 200msec.)

E. REV REW : At REV PLAY mode, supply power to the plunger momentary. (Duration: approx. 50msec.)

F. STOP : At REV REW mode, supply power to the plunger momentary. (Duration: approx. 50msec.)

Repeat the above operation to FWD PLAY mode.

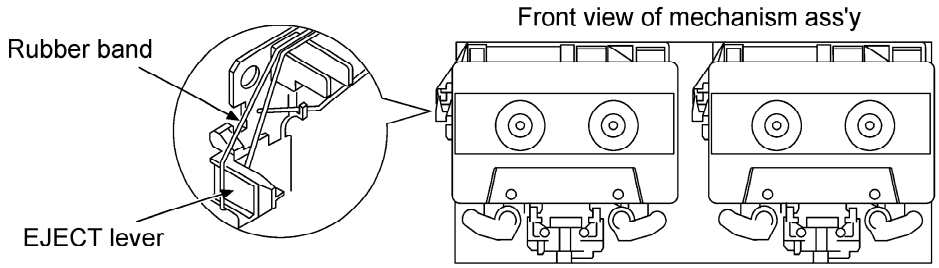
Note: Incorrect duration for power supply may be operated to other mode.

9.1.1. Connection Diagram Between the Mechanism Ass'y and Power Supply / (MOTOR and Plunger)

Fig. 1

9.1.2. Detail View of EJECT Lever / (EJECT lever fixed by rubber band, Plunger rib operation)

Fig. 2

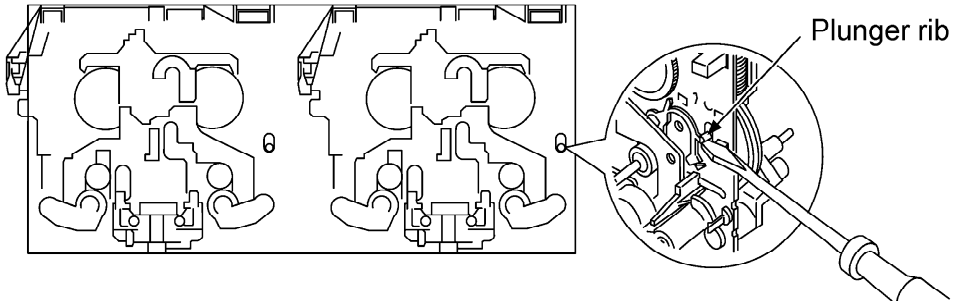


9.2. Operation Check Not Provided with Cassette Tape

1. **Push up the EJECT lever with rubber band. (Refer to Fig. 2)**
2. **Apply DC 5V to the MOTOR. (MOTOR will be rotated)**
3. **Lift up the plunger rib of mechanism ass'y with the tip of minus screwdriver, and then operate it same as power supply duration. (Refer to Fig. 3)**

   Note: Operation order is same as the "Operation Check Providing with Cassette Tape" item 4. above.

Fig. 3

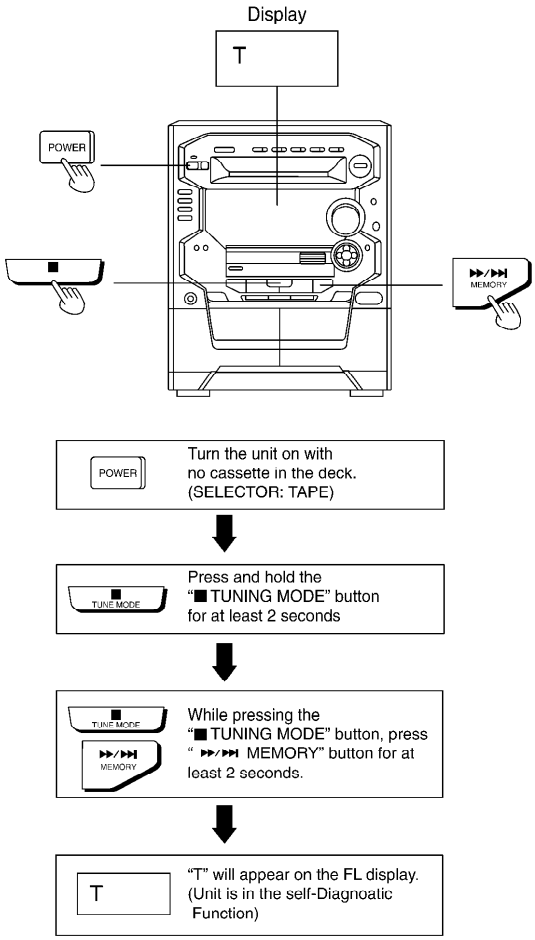


10. Self-Diagnostic Display Function

● **Self-Diagnostic display**

This unit is equipped with a self-diagnostic display function which, if a problem occurs, will display an error code corresponding to the problem. Use this function when performing maintenance on the unit.

● **How to set the Self-Diagnostic Function**



● **Cassette Mechanism Test / (For error code H01, H02, H03, F01, F02)**

1. **Press "TAPE, DECK 1/2" to select Deck 2.**
2. **Load a cassette tape with the erasure prevention tab removed from the left side only and close the cassette holder.**
3. **Press "MEMORY" button. (FAST FORWARD shall be executed for 2 seconds, afterwhich it will STOP)**
4. **Load a cassette tape with the erasure prevention tab removed from the right side only and close the cassette holder.**
5. **Press "FM MODE/BP" button. (REWIND shall be executed for 2 seconds, afterwhich it will STOP)**
6. **Load a pre-recorded tape with both recording tabs intact and close the cassette holder.**
7. **Press "TUNE/TIME ADSJ ^" button.**

8. Press “●REC/STOP” button. (Tape will not move)
9. Press “■TUNE MODE” button to indicate Error Code. (Error Code is displayed for DECK1 when DECK selector is switched to DECK1 and display for DECK2 when it is switched to DECK2)
10. Press “TAPE, DECK1/2” button to select DECK1.
11. Repeate step 2 to 9 to test DECK1. (Tape Deck1 will not check H02 because of no recording function)

● CD Mechanism Test / (F15, F16, F17, F26, F27, F28, F29, H15)

1. Press “CD” button.
2. Press “CD Manager” button.
3. Press “■/TUNE MODE” button to indicate Error Code.

● To clear all Error Code

1. Press “■/TUNE MODE” button
2. FL will display “CLEAR” for 1 second and changer to “T”.

● How to cancel Self-Diagnostic Function

1. Press “POWER” button OFF.

● Power Amplifier Failure (F61)

1. When power amplifier fail, F61 will be displayed automatically.

11. Description of Error Code

11.1. Error Detection for Cassette Mechanism block

No.	Error	Error Display	Problem Condition
1	MODE SW detection error	H01	Faulty operation of cassette mechanism. / Faulty contac or short-circuit of mechanism mode switch (S951, S971
2	REC INH SW detection error	H02	Recording not possible. / Faulty contact or short-circuit REC INH switch (S974, S975)
3	HALF SW detection error	H03	Playback can not perform. / Faulty contact or short-circ of HALF switch (S952, S972)
4	Reel Pulse detection error	F01	The tape advances slightly and then stops. / Faulty reel pulse, faulty hole detect IC (IC951, IC971)
5	TPS abnormal	F02	Cassette deck will not perform TPS function. / Faulty playback EQ/recording amplifier IC (IC1101)

11.2. Error Detection for CD/Changer block

No.	Error	Error Display	Problem Condition
1	REST SW detection error	F15	CD dose not function. / This error occurs when the Opti Pick Up REST SW (S701) is not detected within the specified time (about 8 seconds)
2	CD tray opens automatically	F16	CLAMP switch (S4) NG (Check & Replace)
3	Does not startup when / “TUNE/TIME ADJ^” button is / pressed	F17	BOTTOM switch (S5) NG (Check & Replace)
4	Transmission error between CD / servo LSI and micon	F26	CD does not function. / This error occurs when the POWER is ON for the CD block and an error is detected after the transmission has started.
5	Startup fails even when you insert CD or the selected disc tray does not open	F27	Tray 1 detect switch or Tray 2 detect switch NG (Check Replace)
6	Cannot insert CD	F28	Tray 1 detect switch NG (Check & Replace)
7	Cannot eject CD	F29	Check if Disc is stuck. Tray 2 detect switch NG (Confirm Replace)
8	CD Tray closes	H15	CD disc tray detect switch NG (S3) (Check & Replace)

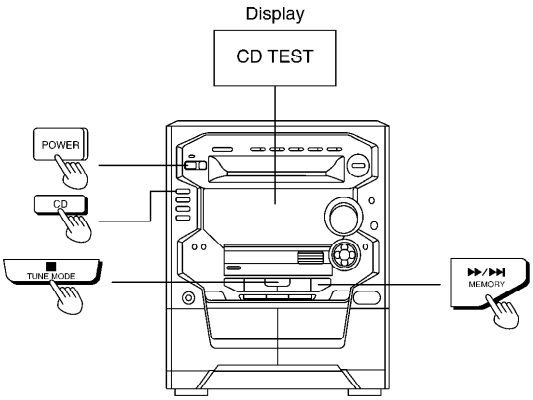
11.3. Error Detection for Cassette Mechanism block

No.	Error	Error Display	Problem Condition
1	POWER AMP output abnormal	F61	When POWER is switch on, power become off automatically. / During normal operation, if DC DET become L, PCNT shall become L and the error display c the left shall be displayed (IC500)

12. CD Test Mode Function

This CD test mode is provided to check CD unit without connecting to changer loading mechanism. This mode shall operate CD PLAY with CD unit being connected only and CD Automatic Alignment result is shown on FL display.

● **How to set CD test mode**



Prepare and set up the CD unit
Check condition (Refer to " checking for the CD servo P.C.B."

↓

CD — Press CD button

↓

TUNE MODE — Press and hold the "■ TUNE MODE" button for at least 2 seconds

↓

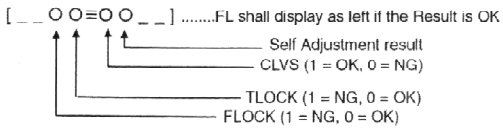
TUNE MODE + ▶▶/▶▶| MEMORY — While pressing the "■ TUNE MODE" button, press " ▶▶/▶▶| MEMORY" button for at least 2 seconds.

↓

Display: CD TEST — "CD TEST" will appear on the FL display. (Unit is in the Self-Diagnostic Function)

● **CD Automatic Alignment result indication**

Under CD test mode, pressing the numeric key '0' on the remote controller will display the auto adjustment result. / FLOCK, TLOCK and CLVS status shall be shown as bellow.



13. Measurement and Adjustments

13.1. Tuner Section

13.1.1. Measuring Instruments and Special Tools

- AM signal generator (AM-SG)
- EVM-AC (AC Electronic voltmeter)
- EVM-DC (DC Electronic voltmeter)
- Osciloscope
- Choke coil (100 μ H)
- AM loop antenna

Note:

- Trimmer will be instability that once you tighten, please adjust with tighten slowly from loosened condition.
- Adjust OSC coil and IFT with nonmetal driver.

13.1.2. AM IF Adjustment

1. Connect the instrument as shown in Fig.1.
2. Set the unit to AM mode.
3. Apply signal sa shown in Fig.1 from AM-SG.
4. Adjust Z102 so that the output frequency is maximized in Fig.2.

Fig.1

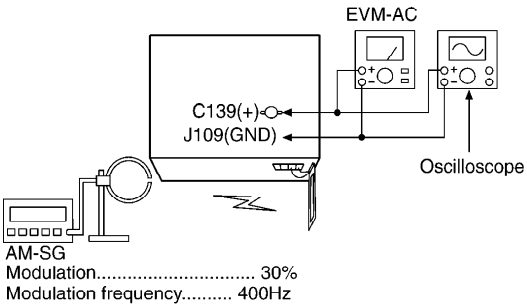
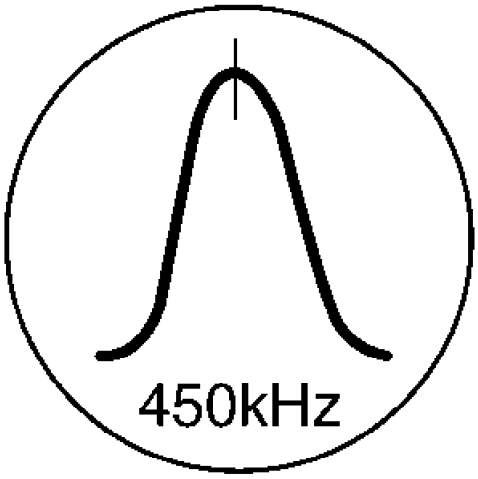


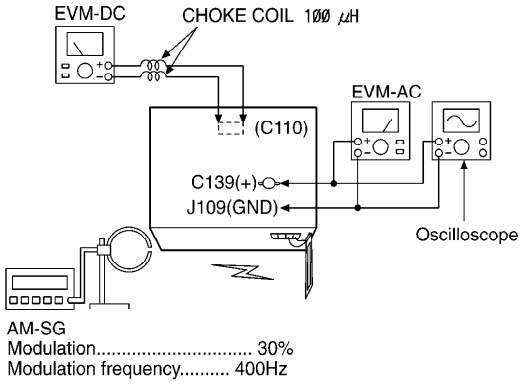
Fig.2



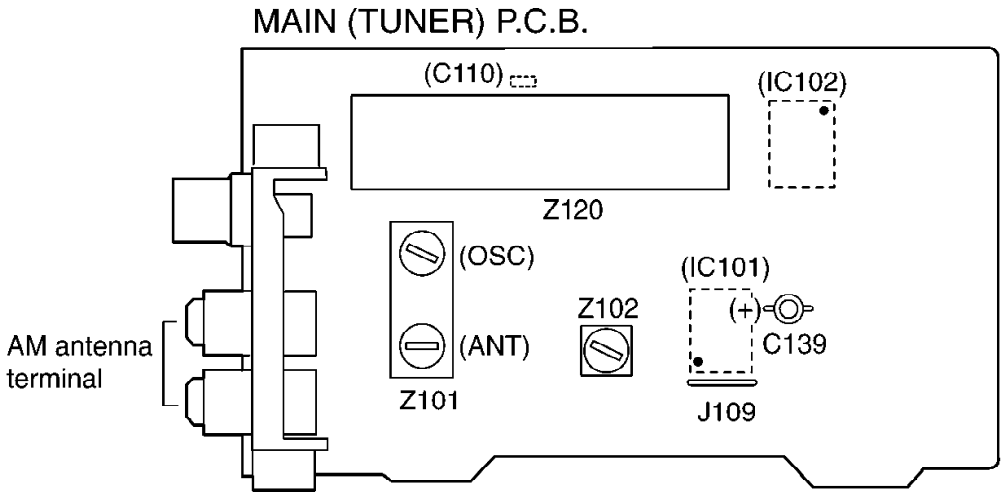
13.1.3. AM RF Adjustment

1. Connect the instrument as shown in Fig.3.
2. Set the unit to AM mode.
3. Set AM-SG to 520kHz.
4. Receive 520kHz in the unit.
5. Adjust Z101 (OSC) so that the EVM-AC is maximized.
6. Set AM-SG to 603kHz.
7. Receive 603kHz in the unit.
8. Adjust Z101 (ANT) so that the EVM-AC is maximized.
9. Set AM-SG to 520kHz.
10. Receive 520kHz in the unit.
11. Adjust Z101 (OSC) so that the EVM-DC value is within 0.5±1.1V.

Fig.3



13.1.4. Adjustment point



13.2. Cassette Deck Section

13.2.1. Measuring Instruments and Special Tools

- Digital frequency counter
- EVM-AC (AC Electronic voltmeter)
- Test tape / QZZCFM : Head azimuth adjustment / QZZCWAT : Tape speed adjustment / QZZCRA : Normal reference blank tape / QZZCRX : CrO2 tape

13.2.2. Head Azimuth Adjustment / (Deck 1/2)

Caution:

- Please replace both azimuth adjustment screws (RHE5152ZB) and springs (RMB0331) simultaneously when readjusting the head azimuth. (Shown in Fig.5). / Even if you wish to readjust the head azimuth without replacing the screws and springs, a fine adjustment cannot be done because of the screw-locking bond adhered to the azimuth screw and spring.
- Please remove the screw-locking bond left on the head base when replacing the azimuth screw.
- If you wish to readjust the head azimuth, be sure to adjust with adhering the cassette tape closely to the mechanism by pushing the center of cassette tape with your finger. (shown in Fig.6)

1. Connect the measuring instrument as shown in Fig.7.
2. Playback the azimuth adjustment portion (8kHz, -20dB) of test tape (QZZCFM). Adjust the azimuth adjusting screw until the outputs of the L/R-ch are maximized. (Refer to Fig.8) / Make sure that the difference in the peak level between the left and right

channels does not exceed 0.5dB.

3. **Perform the same adjustment in reverse playback mode. / Checking of the level difference forward and reverse directions**
4. **Playback the playback gain adjustment portion (315Hz, 0dB) of test tape (QZZCFM). Check if level difference between forward and reverse direction is within 1.5dB.**
5. **After the adjustment, apply screwlock to the azimuth adjusting screw.**

Fig.5

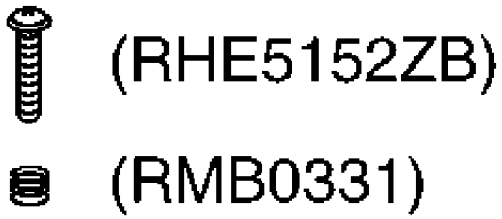


Fig.6

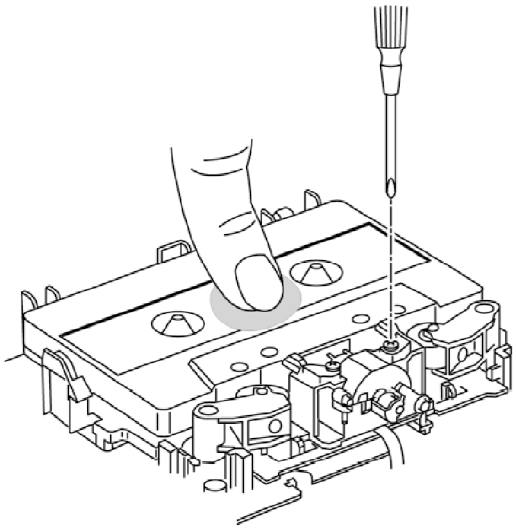


Fig.7

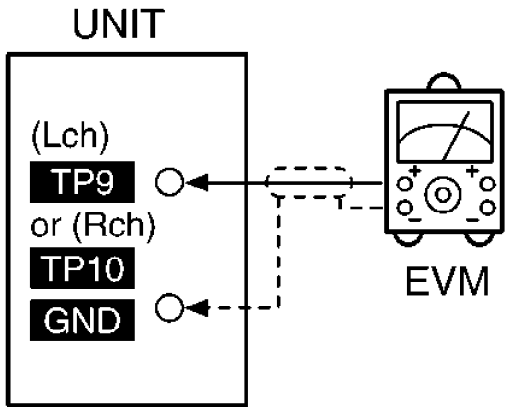
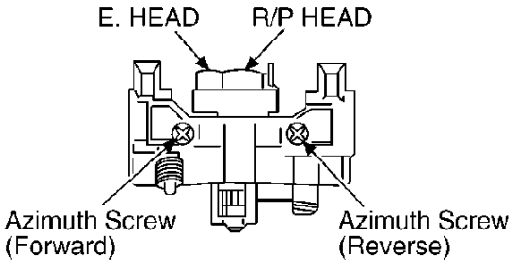


Fig.8



13.2.3. Tape Speed Adjustment (Deck 1/2)

1. **Insert the test tape (QZZCWAT) to Deck 2 and playback (FWD side) the middle portion of it.**
2. **Adjust motor VR (Deck 2) for the output value shown below. / Adjustment target : 2940 - 3060Hz (NORMAL speed)**
3. **After alignment, assure that the output frequency of the DECK2 REV and DECK1 FWD are within ±45Hz and ±60Hz respectively of the value of the output frequency of DECK2 FWD.**

Fig.9

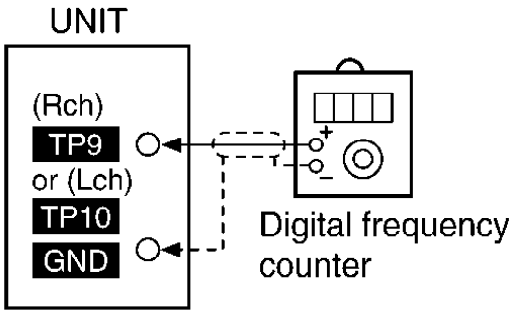
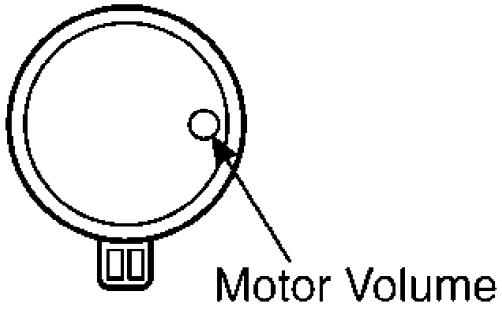


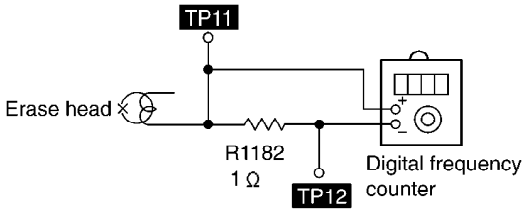
Fig.10



13.2.4. Bias OSC Frequency Adjustment / (Deck 2)

1. **Set the unit to “AUX” position.**
2. **Insert the Normal blank tape (QZZCRA) into DECK2 and set the unit to “REC” mode (use “●REC/STOP” key).**
3. **Adjust L1201 so that the output freguency is within the standard value. / Standard value : 98±8kHz**

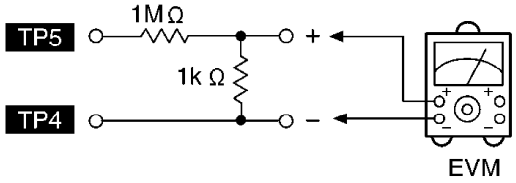
Fig.11



13.2.5. Bias Voltage Check

1. **Set the unit to “AUX” position.**
2. **Insert the Normal blank tape (QZZCRA) into DECK2 and set the unit to “REC” mode (use “●REC/STOP” key).**
3. **Measure and make sure that the output is within the standard value.**
4. **Insert the CrO2 tape (QZZCRX).**
5. **Repeat step 2 and 3. / Standard value (Normal) : 19±4mV / Standard value (CrO2) : 27±5mV**

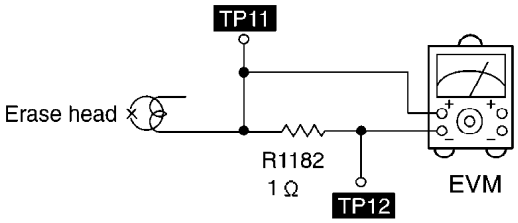
Fig.12



13.2.6. Erase Voltage Check

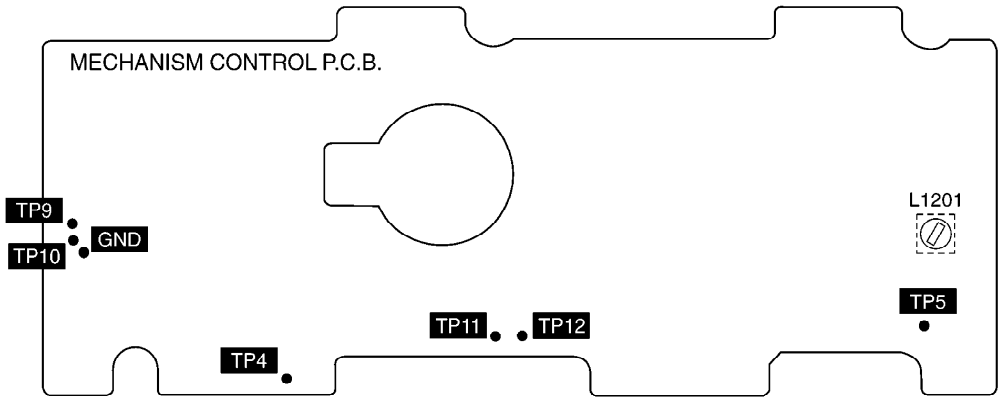
1. Set the unit to “AUX” position.
2. Insert the Normal blank tape (QZZCRA) into DECK2 and set the unit to “REC” mode (use “●REC/STOP” key).
3. Measure and make sure that the output is within the standard value.
4. Insert the CrO2 tape (QZZCRX).
5. Repeat step 2 and 3. / Standard value (Normal) : more than 100mV / Standard value (CrO2) : more than 150mV

Fig.13



13.2.7. Adjustment Point

Fig.14



14. Illustration of ICs, Transistors and Diodes

15. Schematic Diagram

15.1. Schematic Diagram Notes

- This schematic diagram may be modified at any time with the development of new technology.

Notes:

-S1 : Tray position 1 detect switch in OFF position

-S2 : Tray position 2 detect switch in OFF position

-S3 : Tray open detect switch in OFF position

-S4 : Clump switch in OFF position

-S5 : Bottom switch on OFF position

-S600 : CD management switch (CD MANAGER)

-S600A : Sound control jog switch (SOUND CONTROL JOG)

-S601 : Disc direct play switch (CD1)

-S602 : Disc1 direct open/close switch (⏏)

-S603 : Disc direct play switch (CD2)

-S604 : Disc2 direct open/close switch (⏏)

-S605 : Disc direct play switch (CD3)

-S606 : Disc3 direct open/close switch (⏏)

-S607 : Disc direct play switch (CD4)

-S608 : Disc4 direct open/close switch (⏏)

-S609 : Disc direct play switch (CD5)

-S610 : Disc5 direct open/close switch (⏏)

-S611 : Dolby pro logic on/off switch (PRO LOGIC)

-S612 : Deck1 open switch (⏏DECK1 OPEN)

-S613 : Tape edit switch (TAPE EDIT)

-S614 : Recording start/stop switch (●REC/ STOP)

-S615 : Reverse mode select switch (REV MODE)

-S616 : Disc2 open switch (⏏DECK2 OPEN)

-S617 : FF/skip, memory switch (▶▶/▶▶|, MEMORY)

-S618 : Playback/pause, tuning, time adjust switch / (▶/▌▌, TUNE/TIME ADJ/\)

-S619 : Stop/tune mode switch (■/TUNE MODE)

-S620 : Playback, tuning, time adjust switch / (◀, \/TUNE/TIME ADJ)

-S621 : REW/R.skip, FM mode/beat proof switch / (|◀◀/◀◀, FM MODE/BP)

-S622 : Sound EQ down switch (▼)

-S623 : Sound EQ left switch (◀)

-S624 : Sound EQ up switch (▲)

-S625 : Clock/timer select switch (CLOCK/TIMER)

-S626 : Sound EQ right switch (▶)

-S627 : Play timer/record timer switch (◴PLAY/◴ REC)

-S628 : 3D AI EQ switch (3D AI EQ)

-S629 : Auxiliary input switch (AUX)

-S630 : Super woofer switch (S. WOOFER)

-S631 : Tape/deck select switch (TAPE/DECK 1/2)

-S632 : Display select/demonstration mode switch / (-DISPLAY/—DEMO)

-S633 : Tuner/deck select switch (TUNER/BAND)

-S634 : Random play switch (RANDOM)

-S635 : CD switch (CD)

-S636 : Eco switch (MODE)

-S638 : Standby/on switch (⏻/I, POWER)

-S701 : Rest switch (REST)

-S951 : Deck1 mode detect switch (MODE)

-S952 : Deck1 half detect switch (HALF)

-S953 : Deck1 CrO2 tape detect switch (ATS/ CrO2)

-S971 : Deck2 mode select switch (MODE)

-S972 : Deck2 half detect switch (HALF)

-S973 : Deck2 CrO2 tape detect switch (ATS/ CrO2)

-S974 : Deck2 reverse side record prevention tab detect switch (R. REC. INH)

-S975 : Deck2 forward side record prevention tab detect switch (F. REC. INH)

-VR600 : Volume control (VOLUME)

- Indicated voltage values are the standard values for the unit meaured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. / Therefore, there may exist some error in the voltage values, depending on the internal impedance of the DC circuit tester. / No mark ..... CD STOP / ( )..... CD playback (1kHz, L+R, 0dB) / < >..... FM / 「 」..... AM / (( ))..... DECK2 playback / 《 》..... DECK2 record

- Important safety notice: / Components identified by ⚠ mark have special characteristics important for safety. / Furthermore, special parts which have purposes of fire-retardent (resistors), hight-quality sound (capacitors), low-noise (resistors), etc. are used. /

When replacing any of components, be sure to use only manufacturers specified parts shown in the parts list.

- Caution! / IC and LSI are sensitive to static electricity. / Secondary trouble can be prevented by taking care during repair. / Ground the soldering iron. / Put a conductive mat on the work table. / Do not touch the legs of IC or LSI with the fingers directly.

- *L10 - L20 are printed coils formed on the P.C.B. and thus not found in the Replacement Parts list.

- Voltage and signal line / : Positive voltage line / : Negative voltage line / : CD signal line / : FM signal line / : FM OSC signal line / : AM signal line / : AM OSC signal line / : Tape playback signal line / : Tape recording signal line / : Center SP. drive signal line / : Surround SP. drive signal line

15.2. Schematic Diagram

16. Printed Circuit Board Diagram

17. Block Diagram

18. Troubleshooting Guide

19. Wiring Connection Diagram

20. Terminal Function of ICs

20.1. IC600 (M38199MF229F): / System Control and FL Driver

Pin No.	Terminal Name	I/O	Function
1	CRT/ SER4	I	CRT timer
2	TPS	I	TPS signal input
3	DECK1	I	Deck1 mechanism condition input
4	DECK2	I	Deck2 mechanism condition input
5-8	KEY4-KEY1	I	Operation switch signal input
9	SER1	O	Serial clock output for IC601 and IC602
10	CDRST	O	Reset signal output for CD circuit
11	SER3	O	Serial data output for IC303 and IC602
12	SER5	O	Serial data/clock output for IC303, IC801 and IC1105
13	SPE	I	Spectrum analyzer signal input
14	V JOG A/B	I	Volume control signal input
15	J JOG A/B	I	Sound control signal input
16	CHG AD1	I	Open detect switch (S3) and clump detect switch (S4) signal input
17	CHG AD2	I	Position sensor (D1) and bottom detect switch (S5) signal input
18	SER2	O	Serial data/clock output for IC601 and IC1105
19	STATUS	I	Status signal input from CD circuit
20	SQCLK	O	CD subcode clock output
21	SD	I	Station detector signal input for tuner circuit
22	SUBQ	I	CD subcode data input
23	CHG CW	O	CD mechanism motor control signal output (forward direction)
24	CHG CCW	O	CD mechanism motor control signal output (reverse direction)
25	CHG HALF	O	CD mechanism motor speed control signal output
26	MLD/ / PLLCE	O	CD command load signal output and tuner chip enable output

Pin No.	Terminal Name	I/O	Function
27	MDATA/ / PLLDA	O	CD command data output and tuner PLL data output
28	MCLK/ / PLLCLK	O	CD command data output and tuner PLL clock output
29	REST SW	I	Rest switch (S701) signal input
30	BLKCK	I	CD subcode block clock input
31	RMT	I	Remote control signal input
32	DCDET	I	DC ditect terminal
33	ECONO	O	Eco signal output
34	SYNC	I	AC power source detect signal input
35	/RESET	I	System reset signal input
36	XCIN	I	Oscillator connection / (Sub clock : 32.768kHz)
37	XCOUT	O	Oscillator connection / (Sub clock : 32.768kHz)
38	XIN	I	Oscillator connection (Main clock : 8.0kHz)
39	XOUT	O	Oscillator connection (Main clock : 8.0kHz)
40	VSS	-	GND
41	MBP1	O	Beat proof control signal output
42	MBP2	O	Beat proof control signal output
43	CHG SW2	I	Disc tray position 2 detect signal input
44	CHG SW1	I	Disc tray position 1 detect signal input
45	CHG PLGR	O	CD mechanism solenoid control signal output
46	SPA	O	Spectrum analyzer band control signal output
47	SPB		
48	SPC		
49 /	/ 60	GRD1 /	/ GRD12	O	FL grid signal output
61 /	/ 90	SEG33 /	/ SEG4	O	FL segment signal output
91	VCC	I	Power supply (+5V)

Pin No.	Terminal Name	I/O	Function
92 / | / 94	SEG3 / | / SEG1	O	FL segment signal output
95	REG IN	I	Region select signal input
96	EEDATA	O	Serial data output for IC801 and IC803
97	EECLK	-	Not used, open
98	VEE	-	Power supply (-30V)
99	AVSS	-	GND
100	VREF	I	Reference voltage input

20.2. IC701 (AN8839NSBE2): / Servo Amp

Pin No.	Terminal Name	I/O	Function
1	PDE	I	Tracking signal input terminal 1 (E ch)
2	PDF	I	Tracking signal input terminal 2 (F ch)
3	V_{CC}	I	Power supply terminal
4	PDA	I	Focus signal input terminal 1 (A ch)
5	PDB	I	Focus signal input terminal 2 (B ch)
6	LPD	I	Laser PD signal
7	LD	O	Laser power auto control output
8	RF	O	RF amp terminal
9	RFIN	I	AGC input terminal
10	CSBRT	I	OFTR capacitor connection terminal
11	CEA	I	HPF-AMP capacitor connection terminal
12	BDO	O	Dropout detection control
13	LDON	I	LD APC ON/OFF (H: ON)
14	GND	-	GND terminal
15	/RFDET	O	RF detect signal output (L: detect)
16	PDOWN	-	Power down terminal
17	OFTR	O	Off track detection (H: detect)
18	NC	-	Not used, open
19	ENV	O	Envelope signal output
20	NC	-	Not used, open
21			

Pin No.	Terminal Name	I/O	Function
22	TEN	I	Tracking error signal input
23	TEOUT	O	Tracking error signal output
24	FEOUT	O	Focus error signal output
25	FEN	I	Focus error signal input
26	VREF	O	Reference voltage output
27	TBAL	I	Tracking balance adj. input
28	FBAL	I	Focus balance adj. input

20.3. IC702 (MN662790RSC): / Servo Processor/Digital Signal Processor/Digital Filter/ / D/A converter

Pin No.	Terminal Name	I/O	Function
1	BCLK	-	Serial bit clock output (Not used, open)
2	LRCK	-	L/R discriminating signal output (Not used, open)
3	SRDATA	-	Serial data signal output (Not used, open)
4	$DV_{DD}1$	I	Power supply terminal
5	$DV_{SS}1$	-	GND terminal
6	TX	O	Digital audio interface signal output
7	MCLK	I	Command clock signal input
8	MDATA	I	Command data signal input
9	MLD	I	Command load signal input
10	SENSE	-	Sense signal (Not used, open)
11	/FLOCK	-	Optical servo condition (focus) (Not used, open)
12	/TLOCK	-	Optical servo condition (tracking) (Not used, open)
13	BLKCK	O	Sub-code block clock signal output (f=75 Hz)
14	SQCK	I	Sub-code Q resistor clock signal input
15	SUBQ	O	Sub-code Q data signal output
16	DMUTE	-	Muting input (Not used, connected to GND)
17	STAT	O	Status signal output
18	/RST	I	Reset signal input (L: reset)

Pin No.	Terminal Name	I/O	Function
19	SMCK	-	System clock (f=4.2336 MHz) (Not used, open)
20	CSEL	I	Frequency control terminal of crystal oscillator (Connected to V_{DD})
21	TRV	-	Traverse servo control signal output (Not used, open)
22	TVD	O	Traverse drive signal output
23	PC	O	Turntable motor drive signal output (L: ON)
24	ECM	O	Turntable motor drive signal output (Forced mode)
25	ECS	O	Turntable motor drive signal output (Servo error signal)
26	KICK	-	Kick pulse output (Not used, open)
27	TRD	O	Tracking drive signal output
28	FOD	O	Focus drive signal output
29	VREF	I	D/A drive output normal voltage input
30	FBAL	O	Focus balance adj. output
31	TBAL	O	Tracking balance adj. output
32	FE	I	Focus error signal input
33	TE	I	Tracking error signal input
34	RFENV	I	RF envelope signal input
35	VDET	I	Oscillator detect signal input (H: detect)
36	OFT	I	Off track signal input (H: Off track)
37	TRCRS	I	Track cross signal input
38	/RFDET	I	RF detect signal input (L: detect)
39	BDO	I	Dropout detection signal input (H: dropout)
40	LDON	O	Laser power control signal output (H: ON)
41	PLLF2	-	PLL loop filter terminal (Not used, open)
42	DSLF2	I/O	DSL loop filter terminal
43	WVEL	-	Double velocity status signal output (Not used, open)

Pin No.	Terminal Name	I/O	Function
44	ARF	I	RF signal input
45	IREF	I	Reference current input
46	DRF	I	DSL bias terminal
47	DSLF	I/O	DSL loop filter terminal
48	PLLF	I/O	PLL loop filter terminal
49	VCOF	-	VCO loop filter terminal (Not used, connected to GND)
50	$AV_{DD}2$	I	Power supply terminal
51	$AV_{SS}2$	-	GND terminal
52	EFM	-	EFM signal (Not used, open)
53	PCK	-	PLL extract clock (Not used, open)
54	VCOF2	-	VCO loop filter terminal (Not used, connected to GND)
55	SUBC	-	Sub-code serial output clock (Not used, open)
56	SBCK	-	Sub-code serial input data (Not used, connected to GND)
57	V_{SS}	-	GND terminal
58	X1 IN	I	Crystal oscillator terminal (f= 16.9344 MHz)
59	X2 OUT	O	
60	V_{DD}	I	Power supply terminal
61	BYTCK	-	Byte clock signal (Not used, open)
62	/CLDCK	-	Sub-code frame clock signal (Not used, open)
63	FCLK	-	Crystal frame clock (Not used, open)
64	IPFLAG	-	Interpolation flag terminal (Not used, open)
65	FLAG	-	Flag terminal (Not used, open)
66	CLVS	-	Turntable servo phase synchro signal (Not used, open)
67	CRC	-	Sub-code CRC check terminal (Not used, open)
68	DEMPH	-	De-emphasis ON signal (Not used, open)
69	RESY	-	Re-synchronizing signal of frame sync. (Not used, open)
70	IOSEL	I	I/O select signal input (Connected to V_{DD})

Pin No.	Terminal Name	I/O	Function
71	/TEST	I	Test terminal (Not used, connected to power supply)
72	$AV_{DD}1$	I	Power supply terminal
73	OUTL	O	L ch audio signal output
74	$AV_{SS}1$	-	GND terminal
75	OUTR	O	R ch audio signal output
76	RSEL	I	Polarity direction control terminal of RF signal (Not used, connected to power supply)
77	IOV_{DD}	I	Power supply terminal
78	PSEL	I	Test terminal (Connected to GND)
79	MSEL	-	Output frequency select signal input (Not used, connected to GND)
80	SSEL	I	SUBQ output mode select signal input (Not used, connected to V_{DD})

20.4. IC703 (AN8739SBE2): / Focus Coil/Tracking Coil/ / Traverse Motor/Spindle / Motor Drive

Pin No.	Terminal Name	I/O	Function
1	/RST	-	Not used, open
2	NC	-	Not used
3	IN2	I	Motor driver 2 input
4	PC2	I	Turntable motor drive signal input (L: ON)
5	NC	-	Not used
6	IN1	I	Motor driver 1 input
7	$PV_{CC}1$	I	Driver power supply terminal 1
8	PGND1	-	Driver GND terminal 1
9	NC	-	Not used, connected to GND
10	D1-	O	Motor driver 1 output terminal (-)
11	D1+	O	Motor driver 1 output terminal (+)
12	D2-	O	Motor driver 2 output terminal (-)
13	D2+	O	Motor driver 2 output terminal (+)
14	D3-	O	Motor driver 3 output terminal (-)
15	D3+	O	Motor driver 3 output terminal (+)

Pin No.	Terminal Name	I/O	Function
16	D4-	O	Motor driver 4 output terminal (-)
17	D4+	O	Motor driver 4 output terminal (+)
18	NC	-	Not used
19	PGND2	-	Driver GND terminal 2
20	PVCC2	I	Driver power supply terminal 2
21	VCC	I	Power supply terminal
22	VREF	I	Reference voltage input terminal
23	IN4	I	Motor driver 4 input
24	IN3	I	Motor driver 3 input
25	RSTIN	I	Reset terminal (Not used, connected to GND)
26	NC	-	Not used, connected to GND

21. Replacement Parts List

Notes:

- **Important safety notice : / Component identified ⚠ mark have special characteristics important safety. / Furthermore, special parts which have purposes of fire-retardant (resistors), hight-quality sound (capacitors), low-noise (resistors), etc. are used. / When replacing any of components, be sure to use only manufactures specified parts shown in the parts list.**
- **The <ODSD> mark in Remarks indicates source of supply.**
- **The marking (RTL) indicates thet Retention Time is Limited for this item. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of item. The retention period of availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will on longer be available.**
- **[M] indicates in the remarks columns indicates parts supplied by MESA.**

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
		CABINET AND CHASSIS		
2	REEX0065	20P FFC	1	[M]
3	REEX0081	19P FFC WIRE	1	[M]
4	REEX0082	26P FFC	1	[M]
5	RGP0784D-S	FRONT PANEL	1	[M]
6	RGU1847-S	RANDOM BUTTON	1	[M]
7	RGU1855-S	DEMO BUTTON	1	[M]
8	RGU1849-Q	S. WOOFER BUTTOM	1	[M]
9	RGU1854-S	AI BUTTON	1	[M]
10	RGU1851-S	CONTROL BUTTON	1	[M]
11	RGL0487-Q	LIGHTING CHIP	1	[M]
12	RGU1845-S	POWER BUTTON	1	[M]
13	RGK1234-K	EQ SHEET	1	[M]
14	RGL0489-Q	CLOCK LIGHT	1	[M]
15	RGU1853-S	CLOCK BUTTON	1	[M]
16	RGU1852-S	DECK BUTTON	1	[M]
17	RKF0585-K	CASS. HOLDER (L)	1	[M]
18	RKF0586-K	CASS. HOLDER (R)	1	[M]
19	RKF0604-S	CASSETTE LID (L)	1	[M]
20	RKF0605-S	CASSETTE LID (R)	1	[M]
21	RKW0601-Q	CASSETTE WINODW (L)	1	[M]
22	RKW0602-Q	CASSETTE WINDOW (R)	1	[M]
23	RXG0049	DAMPER GEAR UNIT	2	[M]
24	RMB0474	CASS. OPEN SPRING	2	[M]
25	RKW0603-V	FL WINDOW	1	[M]
26	RUS757ZAA	CASSETTE HALF SPRING	4	[M]
27	RGK1233-Q	JOG ORNAMENT 1	1	[M]
28	RGK1240-Q	JOG ORNAMENT 2	1	[M]
29	RGK1238B-S	JOG SHEET	1	[M]
30	RGU1848A-Q	FUNCTION BUTTON	1	[M]
31	RMKX0036	BOTTOM CHASSIS	1	[M]
32	RYQ0289-S	JOY UNIT	1	[M]
33	RMKX0038A	CD CHASSIS	1	[M]
34	SHE187-4	SPACER (TRANS)	2	[M]
35	RMN0203	PCB HOLDER	2	[M]
36	RGRX0016K-C1	REAR PANEL	1	[M]
37	RMNX0029-4	SUB-TRANS HOLDER	1	[M]
38	RKMX0045C-S	TOP CABINET (BENT)	1	[M]
39	RGK1232-S	CD LID	1	[M]
40	RGW0330A-S	VOLUME KNOB	1	[M]
41	RGU1850B-Q	DPL BUTTON	1	[M]
42	RYQ0290-S	JOG CYLINDER UNIT	1	[M]
43	RGL0486-Q	DISC LIGHTING CHIP	1	[M]
44	RGB0113-N	PANA BADGE (HOOK TYP	1	[M]
45	RHD30002-H	SCREW	6	[M]
46	RGU1846-S	DISC BUTTON	1	[M]
47	RXXX0017-2	HEAT SINK UNIT	1	[M]
48	RMN0577	JOG CYLINDER BASE	1	[M]
50	RKA0059-K	LEG RUBBER	1	[M]
51	RMN0576-1	FL HOLDER	1	[M]
52	RMRX0030	WIRE HOLDER	1	[M]
53	RMNX0019	PCB SPACER	1	[M]

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
54	XTW3+15T	SCREW	4	[M]
55	XTB3+10JFZ	SCREW	5	[M]
56	XTBS3+8JFZ1	SCREW	26	[M]
57	XTBS26+10J	SCREW	20	[M]
58	XTB3+20J	SCREW	2	[M]
59	XTW3+12T	SCREW	4	[M]
60	XTB3+10J	SCREW	2	[M]
61	RSC0027-2	TUNER PACK	1	[M]
62	REEX0083	14P FFC WIRE	1	[M]
		CASSETTE DECK		
101	RED0050	R/P HEAD BLOCK UNIT	1	[M]
101-1	RHE5152ZB	SCREW	2	[M]
102	RED0051	P/B HEAD BLOCK UNIT	1	[M]
102-1	RHE5152ZB	SCREW	2	[M]
103	RDG0300	REEL BASE GEAR	4	[M]
104	RDG0301	WINDING RELAY GEAR	2	[M]
105	RDK0026	MAIN GEAR	2	[M]
106	RDR0029	RELAY PULLEY	1	[M]
107	RDV0033-4	WINDING BELT	2	[M]
108	RDV0034-1	CAPSTAN BELT 'A'	1	[M]
109	RDV0057	MAIN BELT B	1	[M]
110	RMB0312	TRIGGER LEVER SPRING	2	[M]
111	RMB0400	REEL SPRING	4	[M]
112	RMB0403	HEAB PANEL SPRING	2	[M]
113	RMB0404	BRAKE ROD SPRING	2	[M]
114	RMB0406	FR LEVER SP	2	[M]
115	RMB0408	THRUST SPRING	2	[M]
116	RML0370	TRIGGER LEVER	2	[M]
117	RML0371	FR LEVER	2	[M]
118	RML0372	WINDING LEVER	2	[M]
119	RML0374	EJECT LEVER	2	[M]
120	RMM0131	BRAKE ROD	2	[M]
121	RMM0133-1	EJECT ROD	2	[M]
122	RMQ0519	REEL HUB	4	[M]
123	RMS0398-1	MOVING CORE	2	[M]
124	RSJ0003	PLUNGER	2	[M]
125	RMC0061	PACK SPRING	2	[M]
126	RXF0061	FLYWHEEL 'F' ASS'Y	2	[M]
127	RXF0062	FLYWHEEL 'R' ASS'Y	2	[M]
128	RXG0040	FF RELAY GEAR ASS'Y	2	[M]
129	RMK0283A-J	SUB CHASSIS	2	[M]
130	RXL0124	PINCH ROLLER 'F' ASS	2	[M]
130-1	RMB0401	PINCH ARM SPRING 'F'	2	[M]
131	RXL0125	PINCH ROLLER 'R' ASS	2	[M]
131-1	RMB0402	PINCH ARM SPRING 'R'	2	[M]
132	RXL0126	WINDING ARM ASS'Y	2	[M]
133	RXQ0412	HEAD PANEL ASS'Y	2	[M]
133-1	RMB0405	FR ROD SPRING	2	[M]
133-2	RMM0132	FR ROD	2	[M]
134	REM0088	CAP MOTOR ASS'Y	1	[M]
135	RHD26022	MOTOR SCREW	2	[M]
136	XTW2+5L	HEAD BLOCK UNIT SCRE	4	[M]

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
137	XTW26+10S	SUB-CHASSIS SCREW	6	[M]
138	XYC2+JF17	PCB EARTH SCREW	2	[M]
139	RFKJXED70-K	CHASSIS ASS'Y	1	[M]
		TRAVERSE DECK		
301	RML0517	TIMING LEVER	1	[M]
302	RML0516	PLUNGER LEVER	1	[M]
303	RMB0551	UPPER SPINDLE SPRING	1	[M]
304	RMQ0744	LOWER HOOK	1	[M]
305	RDV0056	BELT	1	[M]
306	RML0525	FRONT LOCK LEVER	1	[M]
307	RML0526	DISC LEVER	1	[M]
308	RDG0424	DRIVE GEAR	1	[M]
309	RDG0425	CHANGE GEAR	1	[M]
310	RDG0427	TRAVERSE CAM GEAR	1	[M]
311	RDG0428	TRAVERSE RELAY GEAR	1	[M]
312	RDG0426	UP/DOWN GEAR	1	[M]
313	RDG0429	PULLEY GEAR	1	[M]
314	RMB0549-1	CHANGE GEAR SPRING	1	[M]
315	RMQ0748	PITCH PLATE	1	[M]
316	RMB0553	PUSH SPRING	1	[M]
317	RML0530	ASSIST LEVER	1	[M]
318	RML0518	CONNECTION LEVER	1	[M]
319	RMM0201	SLIDE PLATE 1	1	[M]
320	RME0258	REAR LOCK SPRING	1	[M]
321	RML0521	REAR LOCK	1	[M]
322	RME0257	TRAY LOCK LEVER SPRI	1	[M]
323	RML0520	TRAY LOCK	1	[M]
324	RMM0202	SLIDE PLATE 2	1	[M]
325	XTB3+10J	SCREW	11	[M]
326	RMR0334	FIXED PLATE	1	[M]
327	RMR0624-W2	CLAMPER	1	[M]
328	RMB0561	ASSIST LEVER SPRING	1	[M]
329	RMR1121-K	MECHA COVER	1	[M]
330	RMA1110-2	TRAY ANGLE	1	[M]
331	RMR1122-H1	TRAY BASE	1	[M]
332	RMM0204	CARRIER	1	[M]
333	RMM0203	DRIVE RACK	1	[M]
334	RDG0432	SPEED UP GEAR	1	[M]
335	RML0524	SLIDE LOCK	1	[M]
336	RML0523	CARRIER LOCK	1	[M]
337	RME0260-1	SLIDE LOCK SPRING	1	[M]
338	RMR1123-H	TRAY	1	[M]
339	RXQ0595	MOTOR SUB ASS'Y	1	[M]
341	RSJ0003	SOLENOLD ASS'Y	1	[M]
343	RMA1106	UPPER PLATE	1	[M]
344	RML0519	8CD LEVER	1	[M]
345	RFKNAAK27GCS	MECHA BASE ASS'Y	1	[M]
346	RML0522	TURNING STOPPER	1	[M]
347	RMQ0745	LOWER SPINDLE	1	[M]
348	RMQ0746	UP/DOWN BASE	1	[M]
349	RMB0550	LOWER SPINDLE SPRING	1	[M]
350	RMQ0747	UPPER HOOK	1	[M]

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
351	RME0263	CLICK SPRING	1	[M]
352	RMQ0743	SPINDLE SHAFT	1	[M]
353	RMB0552	CUSHION SPRING	1	[M]
354	RDG0430	RELAY GEAR 'A'	1	[M]
355	RDG0431	RELAY GEAR 'B'	1	[M]
356	RME0262	DISK LEVER SP.	1	[M]
357	RMA1105	SUPPORT PLATE	1	[M]
358	RAE0152Z-3	TRAVERSE	1	[M]
358-1	SHGD113-1	FLOATING CUSHION	3	[M]
358-2	SNSD38	TRV MOTOR ASS'Y SCREW	2	[M]
359	RME0142	FLOATING SPRING A	1	[M]
360	RME0109	FLOATING SPRING B	3	[M]
361	RMR1124-K1	TRAVERSE CHASSIS	1	[M]
362	RMS0632	TRAVERSE PIN	3	[M]
363	XTN2+6G	SCREW	3	[M]
364	RXQ0304-1	NUT PLATE ASS'Y	3	[M]
365	RXQ0339	TRAVERSE MOTOR ASS'Y	1	[M]
366	XQN17+CG5	NUT PLATE ASS'Y SCREW	1	[M]
369	RMX0141	PUSH SPACER	1	[M]
370	RMQ0749	UPPER SPINDLE	1	[M]
371	RHM0001	MAGNET	1	[M]
372	RMX0140	DISC SPACER	5	[M]
373	RME0261	FRONT LOCK SPRING	1	[M]
374	RMQ0742	SPINDLE BASE	1	[M]
		INTEGRATED CIRCUITS		
IC1	TA7291P	IC DRIVE	1	[M]
IC101	LA1833NMNTLM	IC IF & MPX	1	[M]
IC102	LC72131MDTRM	IC PLL	1	[M]
IC301	M62456FPE1	IC BTL	1	[M]
IC302	M5218AP	IC BUFFER AMP	1	[M]
IC303	M62433AFP	IC AUDIO	1	[M]
IC500	RSN311W64A-P	IC HIC	1	[M] ⚠
IC501	STK470-040	IC HIC	1	[M] ⚠
IC600	M38199MF229F	IC MICRO PROCCESSOR	1	[M]
IC601	BU2090AF-E2	IC I/O EXPANDER	1	[M]
IC602	BU2090AF-E2	IC I/O EXPANDER	1	[M]
IC603	M62457FPE1	IC SPEANA	1	[M]
IC701	AN8839NSBE2	IC RF HEAD AMP	1	[M]
IC702	MN662790RSC	IC LSI	1	[M]
IC703	AN8739SBE2	IC 4CH DRIVER	1	[M]
IC801	LV1041M	IC DPL	1	[M]
IC802	BA178M09T	IC 9V REC	1	[M] ⚠
IC803	BU2090AF-E2	IC I/O EXPANDER	1	[M]
IC804	BA4558FE2	IC	1	[M]
IC951	0N2180RLC1	IC PHOTO INTERUPTOR	1	[M]
IC971	0N2180RLC1	IC PHOTO INTERUPTOR	1	[M]
IC1101	M51167AFP-TB	IC R/P	1	[M]
IC1102	BA7755A	IC SW	1	[M]
IC1105	BU2090AF-E2	IC I/O EXPANDER	1	[M]
		TRANSISTORS		

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
Q1A	2SK544F-AC	TRANSISTOR	1	[M]
Q1	RVTDTC143EST	TRANSISTOR	1	[M]
Q2	2SC2786MTA	TRANSISTOR	1	[M]
Q3	2SC2787FL1TA	TRANSISTOR	1	[M]
Q4	2SC2787FL1TA	TRANSISTOR	1	[M]
Q101	2SC2058SPTA	TRANSISTOR	1	[M]
Q106	KRA102MTA	TRANSISTOR	1	[M]
Q200	KTD1304TA	TRANSISTOR	1	[M]
Q304	KTC3875GRTA	TRANSISTOR	1	[M]
Q306	KRA102STA	TRANSISTOR	1	[M]
Q307	KRC111STA	TRANSISTOR	1	[M]
Q311	KRC111STA	TRANSISTOR	1	[M]
Q350	2SB621ARSTA	TRANSISTOR	1	[M]
Q351	KRC102STA	TRANSISTOR	1	[M]
Q352	KRA102STA	TRANSISTOR	1	[M]
Q400	KTD1304TA	TRANSISTOR	1	[M]
Q501	2SB1417PQTA	TRANSISTOR	1	[M] ⚠
Q503	2SC2785FTA	TRANSISTOR	1	[M]
Q505	KTC3199GRTA	TRANSISTOR	1	[M]
Q509	KRC110MTA	TRANSISTOR	1	[M]
Q510	2SD2144STA	TRANSISTOR	1	[M]
Q512	2SC1740SSTA	TRANSISTOR	1	[M]
Q515	2SC3940AQSTA	TRANSISTOR	1	[M] ⚠
Q516	KTC3199GRTA	TRANSISTOR	1	[M]
Q519	2SB1417PQTA	TRANSISTOR	1	[M] ⚠
Q602	KTA12710YTA	TRANSISTOR	1	[M]
Q604	KRC103MTA	TRANSISTOR	1	[M]
Q605	2SA933SSTA	TRANSISTOR	1	[M]
Q606	KTC3199GRTA	TRANSISTOR	1	[M]
Q607	KRC102MTA	TRANSISTOR	1	[M]
Q608	KTC3199GRTA	TRANSISTOR	1	[M]
Q609	RVTDTC143EST	TRANSISTOR	1	[M]
Q610	RVTDTC143EST	TRANSISTOR	1	[M]
Q611	RVTDTC143EST	TRANSISTOR	1	[M]
Q701	2SA1037AKSTX	TRANSISTOR	1	[M]
Q801	2SD2114K1V	TRANSISTOR	1	[M]
Q802	2SD2114K1V	TRANSISTOR	1	[M]
Q803	KRA111STA	TRANSISTOR	1	[M]
Q804	KRA111STA	TRANSISTOR	1	[M]
Q975	2SC1740SSTA	TRANSISTOR	1	[M]
Q977	2SC3940AQSTA	TRANSISTOR	1	[M] ⚠
Q978	KRC102MTA	TRANSISTOR	1	[M]
Q1101	2SJ498CDTA	TRANSISTOR	1	[M]
Q1102	2SJ498CDTA	TRANSISTOR	1	[M]
Q1103	2SJ498CDTA	TRANSISTOR	1	[M]
Q1104	2SJ498CDTA	TRANSISTOR	1	[M]
Q1107	DTC144TKA146	TRANSISTOR	1	[M]
Q1108	DTC144TKA146	TRANSISTOR	1	[M]
Q1115	2SD2114K1V	TRANSISTOR	1	[M]
Q1116	2SD2114K1V	TRANSISTOR	1	[M]
Q1118	2SC2412KT96R	TRANSISTOR	1	[M]
Q1119	2SC2412KT96R	TRANSISTOR	1	[M]

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
Q1120	2SC2412KT96R	TRANSISTOR	1	[M]
Q1121	2SC2412KT96R	TRANSISTOR	1	[M]
Q1151	DTC144TKA146	TRANSISTOR	1	[M]
Q1152	DTC144TKA146	TRANSISTOR	1	[M]
Q1153	2SC2412KT96R	TRANSISTOR	1	[M]
Q1154	2SC2412KT96R	TRANSISTOR	1	[M]
Q1171	2SD1302STA	TRANSISTOR	1	[M]
Q1173	DTC144TKA146	TRANSISTOR	1	[M]
Q1174	2SC2412KT96R	TRANSISTOR	1	[M]
Q1175	2SC2002KTA	TRANSISTOR	1	[M]
Q1176	2SC2002KTA	TRANSISTOR	1	[M]
Q1179	2SC2412KT96R	TRANSISTOR	1	[M]
Q1203	2SD965RTA	TRANSISTOR	1	[M]
Q1206	2SB621RTA	TRANSISTOR	1	[M]
Q1207	2SB621RTA	TRANSISTOR	1	[M]
Q1208	DTC114TKA146	TRANSISTOR	1	[M]
Q1209	DTC114TKA146	TRANSISTOR	1	[M]
Q1218	DTA114EKA146	TRANSISTOR	1	[M]
Q1220	DTA143XKA146	TRANSISTOR	1	[M]
		DIODES		
D1	GP1S94	DIODE	1	[M]
D1A	SVC211SPA-AL	DIODE	1	[M]
D2	MTZJ4R7BTA	DIODE	1	[M]
D2A	SVC211SPA-AL	DIODE	1	[M]
D3	SVC211SPA-AL	DIODE	1	[M]
D101	UDZSTE175R1B	DIODE	1	[M] ⚠
D201	1SS355TE17	DIODE	1	[M]
D302	UDZSTE175R1B	DIODE	1	[M] ⚠
D306	DAP202KT146	DIODE	1	[M]
D307	DAP202KT146	DIODE	1	[M]
D308	1SS355TE17	DIODE	1	[M]
D309	1SS355TE17	DIODE	1	[M]
D311	1SS355TE17	DIODE	1	[M]
D312	RL1N4003S-P	DIODE	1	[M]
D313	1SS355TE17	DIODE	1	[M]
D314	RL1N4003S-P	DIODE	1	[M]
D315	1SS355TE17	DIODE	1	[M]
D316	RL1N4003S-P	DIODE	1	[M]
D317	1SS355TE17	DIODE	1	[M]
D401	1SS355TE17	DIODE	1	[M]
D501	1D3E	DIODE	1	[M]
D502	RL1N4003S-P	DIODE	1	[M]
D503	RL1N4003S-P	DIODE	1	[M]
D504	MTZJ30BTA	DIODE	1	[M] ⚠
D506	MTZJ8R2BTA	DIODE	1	[M]
D507	MTZJ10BTA	DIODE	1	[M]
D508	MTZJ16BTA	DIODE	1	[M]
D509	MTZJ12BTA	DIODE	1	[M]
D512	RVD1SS133TA	DIODE	1	[M]
D513	KBP202G	DIODE	1	[M] ⚠
D514	1D3E	DIODE	1	[M] ⚠

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
D516	1D3E	DIODE	1	[M] ⚠
D517	RK306LFU1	DIODE	1	[M]
D518	RVD1SS133TA	DIODE	1	[M]
D519	RK306LFU1	DIODE	1	[M]
D520	1D3E	DIODE	1	[M]
D521	1D3E	DIODE	1	[M]
D522	MTZJ15CTA	DIODE	1	[M] ⚠
D523	MTZJ12BTA	DIODE	1	[M]
D524	1D3E	DIODE	1	[M]
D526	1D3E	DIODE	1	[M]
D528	RVD1SS133TA	DIODE	1	[M]
D600	SLR325MCT31W	LED	1	[M]
D601	SLR325MCT31W	LED	1	[M]
D602	SLR325MCT31W	LED	1	[M]
D603	SLR325MCT31W	LED	1	[M]
D604	SLR325MCT31W	LED	1	[M]
D605	SLR325MCT31W	LED	1	[M]
D606	SLI325DCT31	LED	1	[M]
D607	SLI325URCT31	LED	1	[M]
D608	SLR325DCT31	LED	1	[M]
D609	SLR325MCT31W	LED	1	[M]
D610	SLR325MCT31W	LED	1	[M]
D611	SLR325MCT31W	LED	1	[M]
D612	SLR325MCT31W	LED	1	[M]
D613	SLR325MCT31W	LED	1	[M]
D614	MA723TA	DIODE	1	[M]
D615	1SS291TA	DIODE	1	[M]
D616	1SS291TA	DIODE	1	[M]
D617	RVD1SS133TA	DIODE	1	[M]
D625	RVD1SS133TA	DIODE	1	[M]
D627	RVD1SS133TA	DIODE	1	[M]
D628	RVD1SS133TA	DIODE	1	[M]
D629	RVD1SS133TA	DIODE	1	[M]
D630	RVD1SS133TA	DIODE	1	[M]
D631	RVD1SS133TA	DIODE	1	[M]
D632	RVD1SS133TA	DIODE	1	[M]
D633	RVD1SS133TA	DIODE	1	[M]
D634	RVD1SS133TA	DIODE	1	[M]
D635	MA700ATA	DIODE	1	[M]
D636	RVD1SS133TA	DIODE	1	[M]
D637	RVD1SS133TA	DIODE	1	[M]
D638	MA4020LTA	DIODE	1	[M] ⚠
D639	MA700ATA	DIODE	1	[M]
D640	MA700ATA	DIODE	1	[M]
D804	UDZS5R1BTA	DIODE	1	[M] ⚠
D951	MA165TA	DIODE	1	[M]
D971	MA165TA	DIODE	1	[M]
D977	RVD1SS133TA	DIODE	1	[M]
D978	1D3E	DIODE	1	[M]
D979	1D3E	DIODE	1	[M] ⚠
D980	1D3E	DIODE	1	[M] ⚠
D981	1D3E	DIODE	1	[M]
D982	MTZJ6R8BTA	DIODE	1	[M] ⚠

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
D985	1D3E	DIODE	1	[M] ⚠
D986	1D3E	DIODE	1	[M] ⚠
D1171	MA111TX	DIODE	1	[M]
D1172	MA8047MTX	DIODE	1	[M]
D1173	MA111TX	DIODE	1	[M]
D1174	MA8036HTX	DIODE	1	[M]
D1175	MA111TX	DIODE	1	[M]
D1201	MA111TX	DIODE	1	[M]
D1202	MA111TX	DIODE	1	[M]
		VARIABLE RESISTORS		
VR600	EVEKE2F3024B	VR VOL. JOG	1	[M]
		SWITCHES		
S600	EVQ21405R	SW CD MANAGER	1	[M]
S601	EVQ11G05R	SW DISC 1	1	[M]
S602	EVQ11G05R	SW DISC 1 EJECT	1	[M]
S603	EVQ11G05R	SW DISC 2	1	[M]
S604	EVQ11G05R	SW DISC 2 EJECT	1	[M]
S605	EVQ11G05R	SW DISC 3	1	[M]
S606	EVQ11G05R	SW DISC 3 EJECT	1	[M]
S607	EVQ11G05R	SW DISC 4	1	[M]
S608	EVQ11G05R	SW DISC 4 EJECT	1	[M]
S609	EVQ11G05R	SW DISC 5	1	[M]
S610	EVQ11G05R	SW DISC 5 EJECT	1	[M]
S611	EVQ21405R	SW DOLBY PRO LOGIC	1	[M]
S612	EVQ21405R	SW DECK 1 OPEN	1	[M]
S613	EVQ21405R	SW TAPE EDIT	1	[M]
S614	EVQ21405R	SW REC/STOP	1	[M]
S615	EVQ21405R	SW REV OPEN	1	[M]
S616	EVQ21405R	SW DECK 2 OPEN	1	[M]
S617	EVQ21405R	SW MEMORY	1	[M]
S618	EVQ21405R	SW TUNE UP	1	[M]
S619	EVQ21405R	SW TUNE MODE	1	[M]
S620	EVQ21405R	SW TUNE DOWN	1	[M]
S621	EVQ21405R	SW FM MODE	1	[M]
S622	EVQ11G07K	SW SOUND EQ DOWN	1	[M]
S623	EVQ11G07K	SW SOUND EQ LEFT	1	[M]
S624	EVQ11G07K	SW SOUND EQ UP	1	[M]
S625	EVQ21405R	SW CLOCK/TIMER	1	[M]
S626	EVQ11G07K	SW SOUND EQ RIGHT	1	[M]
S627	EVQ21405R	SW PLAY/REC	1	[M]
S628	EVQ21405R	SW 3D AI	1	[M]
S629	EVQ21405R	SW AUX	1	[M]
S630	EVQ21405R	SW SWITCH	1	[M]
S631	EVQ21405R	SW TAPE	1	[M]
S632	EVQ21405R	SW DISPLAY/DEMO	1	[M]
S633	EVQ21405R	SW TUNER	1	[M]
S634	EVQ21405R	SW RANDOM	1	[M]
S635	EVQ21405R	SW CD	1	[M]
S636	EVQ21405R	SW ECON	1	[M]
S638	EVQ21405R	SW POWER	1	[M]

[illegible]	[illegible]	[illegible]	1	[illegible]

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
S701	RSH1A043-U	SW REST	1	[M]
S951	RSH1A018-3U	SW LEAF	1	[M]
S952	RSH1A019-2U	SW LEAF	1	[M]
S953	RSH1A019-2U	SW LEAF	1	[M]
S971	RSH1A018-3U	SW LEAF	1	[M]
S972	RSH1A019-2U	SW LEAF	1	[M]
S973	RSH1A019-2U	SW LEAF	1	[M]
S974	RSH1A019-2U	SW LEAF	1	[M]
S975	RSH1A019-2U	SW LEAF	1	[M]
		SWITCHES		
S1	RSH1A032-U	SW PUSH	1	[M]
S2	RSH1A032-U	SW PUSH	1	[M]
S3	RSH1A005-1U	SW	1	[M]
S4	RSH1A91ZA-A	SW CD	1	[M]
S5	RSP1A017-A	SW LOCK	1	[M]
S600A	EVQVXD00112B	SW A1 JOG VOL	1	[M]
		CONNECTORS		
CN1	RJS1A9414	FF CONNECTOR	1	[M]
CN300	RJU057G12	12P P2 MQ CONNECTOR	1	[M]
CN301	RJU057G12	12P P2 MQ CONNECTOR	1	[M]
CN302	RJS1A9426-1	26P FFC CONNECTOR	1	[M]
CN303	RJS1A9420	20P FFC CONNECTOR	1	[M]
CN304	RJS1A5210	10P WIRE HOLDER	1	[M]
CN309	RJS1A9414-1	14P CONNECTOR	1	[M]
CN501	RJT119W13V	13P CONNECTOR	1	[M]
CN502	RJP6G18ZA	SOCKET	1	[M]
CN600	RJT066H08F	CONNECTOR	1	[M]
CN701	RJS2A6016	16P FFC CONNECTOR	1	[M]
CN702	RJS1A6719-1Q	19P FFC CONNECTOR	1	[M]
CN801	RJU057G09	9P CONNECTOR	1	[M]
CN802	RJU057G08	8P CONNECTOR	1	[M]
CN1201	RJS8T7ZA	8P MOLEX	1	[M]
CP304	RJT057G09	9P B-B CONNECTOR	1	[M]
CP305	RJT057G08	8P B-B CONNECTOR	1	[M]
CP500	RJT057G12	12P P2 MQ CONNECTOR	1	[M]
CP501	RJT057G12	12P P2 MQ CONNECTOR	1	[M]
CP600	RJU066H08	8P B-B SOCKET	1	[M]
CP601	RJS1A6219-1	19P FFC CONNECTOR	1	[M]
CP602	RJS1A9426-1	26P FFC CONNECTOR	1	[M]
CP603	RJS1A9420	20P FFC CONNECTOR	1	[M]
CP1101	RJT071K09A	9P B/B CONNECTOR	1	[M]
CP1102	RJT071K09A	9P B/B CONNECTOR	1	[M]
CS951	RJU071H09M1	CONNECTOR	1	[M]
CS971	RJU071H09M1	CONNECTOR	1	[M]
CS1101	RJS1A6805-J	5P CONNECTOR SOCKET	1	[M]
CS1102	RJS1A6805-J	5P CONNECTOR SOCKET	1	[M]
		COILS & TRANSFORMERS		

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
L1	RLQZP1R2KT-Y	COIL	1	[M]
L2	RLQZPR47KT-Y	COIL	1	[M]
L102	RLQB1R0KTD-D	INDUCTOR	1	[M]
L602	RLQZP101KT-Y	AXIAL COIL	1	[M]
L603	RLQZP101KT-Y	AXIAL COIL	1	[M]
L604	RLQZP100KT-Y	AXIAL COIL	1	[M]
L605	RLQZP3R3KT-Y	AXIAL COIL	1	[M]
L606	RLQZP101KT-Y	AXIAL COIL	1	[M]
L801	RLQZB470KT-D	RF CHOKE COIL	1	[M]
L1201	RL08C002M-T	BIAS OSC COIL	1	[M]
L1202	RLQZB470KT-D	RF CHOKE COIL	1	[M]
T501	RTP2P3B001	MAIN TRANSFORMER	1	[M] ⚠
T502	RTP1I3E002-V	BACK UP TRANSFORMER	1	[M] ⚠
		COMPONENT COMBINATIO		
Z101	RLA2Z007-T	COIL	1	[M]
Z102	RLI2Z021M-T	AM IF BLOCK	1	[M]
Z501	ERZV10V511CS	ZENER	1	[M] ⚠
Z600	RCDRPM6937H4	REMOTE CTRL SENSOR	1	[M]
Z971	EXBF7L355SYV	RADA RESISTOR	1	[M]
Z1101	EXBF7L355SYV	RADA RESISTOR	1	[M]
		CERAMIC FILTERS		
CF201	RLFFETWND01M	FM CF	1	[M]
CF202	RLFFETWND01M	FM CF	1	[M]
		RELAY		
RL501	RSY0037M-C	RELAY	1	[M] ⚠
RL502	RSY0040M-0	PRIMARY RELAY	1	[M] ⚠
		OSCILLATORS		
X102	RLFDFT22DD	DISCRIMINATOR	1	[M]
X103	RSXC7M20S05T	CRYSTAL OSCILLATOR	1	[M]
X600	RSXD32K7S02	CRYSTAL OSCILLATOR	1	[M]
X601	RSXZ8M00D01T	CERAMIC RESONATOR	1	[M]
X701	RSXZ16M9M01T	CERAMIC OSC	1	[M]
X801	RSXY8M00D01T	CERAMIC RESONATOR	1	[M]
		DISPLAY TUBE		
FL600	RSL0296-F	FL	1	[M]
		FUSES		
F1	XBA2C20TB0	FUSE	1	[M] ⚠
		FUSE HOLDER		

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
FC1	EYF52BC	FUSE HOLDER	1	[M]
FC2	EYF52BC	FUSE HOLDER	1	[M]
		HOLDERS		
H501	RJS1A5513	13P WIRE HOLDER	1	[M]
H600	RMR0317	8P CABLE HOLDER	1	[M]
H601	RMR0317	8P CABLE HOLDER	1	[M]
H602	RMR0317	8P CABLE HOLDER	1	[M]
H603	RMR0315	6P CABLE HOLDER	1	[M]
H1100	RMR0319	10P CABLE HOLDER	1	[M]
		JACKS		
JK101	RJH5414	JK ANTENNA	1	[M]
JK305	RJH2206	JK RCA	1	[M]
JK500	SJS9236-1	JK SOCKET	1	[M] ⚠
JK502	RJR0054B-J	JK SPEAKER	1	[M]
JK503	RJR0054C-J	JK SPEAKER	1	[M]
JK504	RJH2307N	JK PIN	1	[M]
JK600	RJJ37TK07-H	JK HP	1	[M]
		EARTH TERMINAL		
E500	SNE1004-2	EARTH TERMINAL	1	[M]
		WIRES		
W1A	REEX0089	PRIMARY WIRE (YELLOW)	1	[M]
W1	REZ1023-1	4P WIRE	1	[M]
W2A	REEX0032	PRI WIRE (BLACK)	1	[M]
W2	REZ1024	3P WIRE	1	[M]
W500	REXX0202	2P TRANSFORMER WIRE	1	[M]
W501	REXX0224	13P WIRE	1	[M]
W601	RWJ1108080RR	8P WIRE	1	[M]
W602	RWJ0208155RX	8P WIRE	1	[M]
W603	REXX0223	6P WIRE	1	[M]
W1100	RWJ8010160RX	10P WIRE	1	[M]
W1200	RWJ0102065CK	WIRE	1	[M]
		PACKING MATERIALS		
P1	RPGX0655	PACKING CASE	1	[M]
P2	RPN1267	POLYFOAM	1	[M]
P3	RPFX0007	MIRAMAT BAG	1	[M]
		ACCESSORIES		
A1	RAK-SC961WK	REMOTE CONTROL	1	[M]
A1-1	251200F1F	R/C BATTERY COVER	1	[M]
A2	RJA0035-X	AC CORD (SF)	1	[M] ⚠
A3	RQT5404-B	O/I BOOK	1	[M]
A4	RSA0006-J	FM ANTENNA	1	[M]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
A5	RSA0029	AM LOOP ANTENNA	1	[M]
		RESISTORS		
R1	ERDS2TJ102T	1K 1/4W	1	[M]
R1A	ERDS2TJ104T	100K 1/4W	1	[M]
R2	ERDS2TJ104T	100K 1/4W	1	[M]
R3	ERDS2TJ221T	220 1/4W	1	[M]
R4	ERDS2TJ104T	100K 1/4W	1	[M]
R5	ERDS2TJ564T	560K 1/4W	1	[M]
R6	ERDS2TJ391T	390 1/4W	1	[M]
R7	ERDS2TJ272T	2.7K 1/4W	1	[M]
R8	ERDS2TJ684T	680K 1/4W	1	[M]
R9	ERDS2TJ391T	390 1/4W	1	[M]
R10	ERDS2TJ391T	390 1/4W	1	[M]
R11	ERDS2TJ684T	680K 1/4W	1	[M]
R102	ERJ6GEYJ472V	4.7K 1/10W	1	[M]
R103	ERJ6GEYJ271V	270 1/10W	1	[M]
R104	ERJ6GEYJ102V	1K 1/10W	1	[M]
R105	ERJ6GEYJ471V	470 1/10W	1	[M]
R106	ERJ6GEYJ474V	470K 1/10W	1	[M]
R107	ERJ6GEYJ331V	330 1/10W	1	[M]
R110	ERJ6GEYJ102V	1K 1/10W	1	[M]
R111	ERJ6GEYJ391V	390 1/10W	1	[M]
R112	ERJ6GEYJ104V	100K 1/10W	1	[M]
R113	ERJ6GEYJ103V	10K 1/10W	1	[M]
R114	ERJ6GEYJ562V	5.6K 1/10W	1	[M]
R115	ERJ6GEYJ561V	560 1/10W	1	[M]
R116	ERJ6GEYJ102V	1K 1/10W	1	[M]
R117	ERJ6GEYJ473V	47K 1/10W	1	[M]
R118	ERJ6GEYJ332V	3.3K 1/10W	1	[M]
R119	ERJ6GEYJ472V	4.7K 1/10W	1	[M]
R120	ERJ6GEYJ473V	47K 1/10W	1	[M]
R121	ERJ6GEYJ223V	22K 1/10W	1	[M]
R122	ERJ6GEYJ272V	2.7K 1/10W	1	[M]
R123	ERJ6GEYJ683V	68K 1/10W	1	[M]
R124	ERJ6GEYJ330V	33 1/10W	1	[M]
R125	ERJ6GEYJ471V	470 1/10W	1	[M]
R126	ERJ6GEYJ102V	1K 1/10W	1	[M]
R127	ERJ6GEYJ471V	470 1/10W	1	[M]
R128	ERJ6GEYJ820V	82 1/10W	1	[M]
R129	ERJ6GEYJ273V	27K 1/10W	1	[M]
R130	ERJ6GEYJ103V	10K 1/10W	1	[M]
R131	ERJ8GEYJ680V	68 1/8W	1	[M]
R132	ERJ6GEYJ103V	10K 1/10W	1	[M]
R133	ERJ6GEYJ102V	1K 1/10W	1	[M]
R134	ERJ6GEYJ471V	470 1/10W	1	[M]
R135	ERJ6GEYJ102V	1K 1/10W	1	[M]
R136	ERJ6GEYJ102V	1K 1/10W	1	[M]
R137	ERJ6GEYJ102V	1K 1/10W	1	[M]
R138	ERJ6GEYJ332V	3.3K 1/10W	1	[M]
R141	ERJ6GEYJ682V	6.8K 1/10W	1	[M]
R142	ERJ6GEYJ682V	6.8K 1/10W	1	[M]
R143	ERJ6GEYJ223V	22K 1/10W	1	[M]

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
R145	ERJ6GEYJ104V	100K 1/10W	1	[M]
R146	ERJ6GEYJ104V	100K 1/10W	1	[M]
R151	ERJ6GEYJ820V	82 1/10W	1	[M]
R152	ERJ6GEY0R00V	0 1/10W	1	[M]
R201	ERJ6GEYJ103V	10K 1/10W	1	[M]
R202	ERJ6GEYJ472V	4.7K 1/10W	1	[M]
R207	ERJ6GEYJ562V	5.6K 1/10W	1	[M]
R208	ERJ6GEYJ103V	10K 1/10W	1	[M]
R209	ERJ6GEYJ473V	47K 1/10W	1	[M]
R210	ERJ6GEYJ102V	1K 1/10W	1	[M]
R211	ERJ6GEYJ222V	2.2K 1/10W	1	[M]
R212	ERJ6GEYJ472V	4.7K 1/10W	1	[M]
R213	ERJ6GEYJ393V	39K 1/10W	1	[M]
R215	ERJ6GEYJ122V	1.2K 1/10W	1	[M]
R216	ERJ6GEYJ222V	2.2K 1/10W	1	[M]
R217	ERJ6GEYJ683V	68K 1/10W	1	[M]
R218	ERJ6GEYJ332V	3.3K 1/10W	1	[M]
R219	ERJ6GEYJ472V	4.7K 1/10W	1	[M]
R220	ERJ6GEYJ104V	100K 1/10W	1	[M]
R221	ERJ6GEYJ102V	1K 1/10W	1	[M]
R222	ERJ6GEYJ123V	12K 1/10W	1	[M]
R223	ERJ6GEYJ473V	47K 1/10W	1	[M]
R224	ERJ6GEYJ183V	18K 1/10W	1	[M]
R225	ERJ6GEYJ362V	3.6K 1/10W	1	[M]
R226	ERJ6GEYJ101V	100 1/10W	1	[M]
R230	ERJ6GEYJ473V	47K 1/10W	1	[M]
R231	ERJ6GEYJ183V	18K 1/10W	1	[M]
R232	ERJ6GEYJ392V	3.9K 1/10W	1	[M]
R233	ERJ6GEYJ224V	220K 1/10W	1	[M]
R234	ERJ6GEYJ222V	2.2K 1/10W	1	[M]
R240	ERJ6GEYJ473V	47K 1/10W	1	[M]
R248	ERJ6GEYJ390V	39 1/10W	1	[M]
R249	ERJ6GEYJ390V	39 1/10W	1	[M]
R300	ERJ6GEYJ472V	4.7K 1/10W	1	[M]
R301	ERJ6GEYJ223V	22K 1/10W	1	[M]
R302	ERJ6GEYJ183V	18K 1/10W	1	[M]
R303	ERJ6GEYJ100V	10 1/10W	1	[M]
R304	ERJ6GEYJ223V	22K 1/10W	1	[M]
R305	ERJ6GEYJ103V	10K 1/10W	1	[M]
R306	ERJ6GEYJ122V	1.2K 1/10W	1	[M]
R307	ERJ6GEYJ103V	10K 1/10W	1	[M]
R308	ERJ6GEYJ332V	3.3K 1/10W	1	[M]
R309	ERJ6GEYJ332V	3.3K 1/10W	1	[M]
R310	ERJ6GEYJ102V	1K 1/10W	1	[M]
R312	ERJ6GEYJ2R2V	2.2 1/10W	1	[M]
R313	ERJ6GEYJ393V	39K 1/10W	1	[M]
R316	ERJ6GEYJ153V	15K 1/10W	1	[M]
R317	ERJ6GEYJ102V	1K 1/10W	1	[M]
R321	ERJ6GEYJ2R7V	2.7 1/10W	1	[M]
R322	ERJ6GEYJ271V	270 1/10W	1	[M]
R323	ERJ6GEYJ222V	2.2K 1/10W	1	[M]
R324	ERJ6GEYJ222V	2.2K 1/10W	1	[M]
R325	ERJ6GEYJ222V	2.2K 1/10W	1	[M]
R326	ERJ6GEYJ683V	68K 1/10W	1	[M]

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
R327	ERJ6GEYJ154V	150K 1/10W	1	[M]
R332	ERJ6GEYJ824V	820K 1/10W	1	[M]
R334	ERJ6GEYJ274V	270K 1/10W	1	[M]
R335	ERJ6GEYJ472V	4.7K 1/10W	1	[M]
R336	ERJ6GEYJ153V	15K 1/10W	1	[M]
R337	ERJ6GEYJ822V	8.2K 1/10W	1	[M]
R338	ERJ6GEYJ472V	4.7K 1/10W	1	[M]
R339	ERJ6GEYJ823V	82K 1/10W	1	[M]
R340	ERJ6GEYJ823V	82K 1/10W	1	[M]
R342	ERJ6GEYJ103V	10K 1/10W	1	[M]
R343	ERJ6GEYJ392V	3.9K 1/10W	1	[M]
R344	ERJ6GEYJ103V	10K 1/10W	1	[M]
R345	ERJ6GEYJ221V	220 1/10W	1	[M]
R346	ERJ6GEYJ223V	22K 1/10W	1	[M]
R347	ERJ6GEYJ123V	12K 1/10W	1	[M]
R349	ERJ6GEYJ103V	10K 1/10W	1	[M]
R350	ERJ6GEYJ102V	1K 1/10W	1	[M]
R351	ERJ6GEYJ103V	10K 1/10W	1	[M]
R353	ERJ6GEYJ103V	10K 1/10W	1	[M]
R354	ERJ6GEYJ123V	12K 1/10W	1	[M]
R355	ERJ6GEYJ223V	22K 1/10W	1	[M]
R356	ERJ6GEYJ153V	15K 1/10W	1	[M]
R357	ERJ6GEYJ104V	100K 1/10W	1	[M]
R358	ERJ6GEYJ473V	47K 1/10W	1	[M]
R359	ERJ6GEYJ473V	47K 1/10W	1	[M]
R371	ERJ6GEYJ222V	2.2K 1/10W	1	[M]
R372	ERJ6GEYJ222V	2.2K 1/10W	1	[M]
R401	ERJ6GEYJ103V	10K 1/10W	1	[M]
R402	ERJ6GEYJ472V	4.7K 1/10W	1	[M]
R407	ERJ6GEYJ562V	5.6K 1/10W	1	[M]
R408	ERJ6GEYJ103V	10K 1/10W	1	[M]
R409	ERJ6GEYJ473V	47K 1/10W	1	[M]
R410	ERJ6GEYJ102V	1K 1/10W	1	[M]
R411	ERJ6GEYJ222V	2.2K 1/10W	1	[M]
R412	ERJ6GEYJ472V	4.7K 1/10W	1	[M]
R413	ERJ6GEYJ393V	39K 1/10W	1	[M]
R415	ERJ6GEYJ122V	1.2K 1/10W	1	[M]
R416	ERJ6GEYJ222V	2.2K 1/10W	1	[M]
R417	ERJ6GEYJ683V	68K 1/10W	1	[M]
R418	ERJ6GEYJ332V	3.3K 1/10W	1	[M]
R419	ERJ6GEYJ472V	4.7K 1/10W	1	[M]
R420	ERJ6GEYJ104V	100K 1/10W	1	[M]
R421	ERJ6GEYJ102V	1K 1/10W	1	[M]
R422	ERJ6GEYJ123V	12K 1/10W	1	[M]
R423	ERJ6GEYJ473V	47K 1/10W	1	[M]
R424	ERJ6GEYJ183V	18K 1/10W	1	[M]
R425	ERJ6GEYJ362V	3.6K 1/10W	1	[M]
R426	ERJ6GEYJ101V	100 1/10W	1	[M]
R430	ERJ6GEYJ473V	47K 1/10W	1	[M]
R431	ERJ6GEYJ183V	18K 1/10W	1	[M]
R432	ERJ6GEYJ392V	3.9K 1/10W	1	[M]
R433	ERJ6GEYJ224V	220K 1/10W	1	[M]
R434	ERJ6GEYJ222V	2.2K 1/10W	1	[M]
R435	ERJ6GEYJ273V	27K 1/10W	1	[M]

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
R440	ERJ6GEYJ473V	47K 1/10W	1	[M]
R444	ERJ6GEYJ223V	22K 1/10W	1	[M]
R448	ERJ6GEYJ390V	39 1/10W	1	[M]
R449	ERJ6GEYJ390V	39 1/10W	1	[M]
R452	ERJ6GEYJ103V	10K 1/10W	1	[M]
R453	ERJ6GEYJ472V	4.7K 1/10W	1	[M]
R454	ERJ6GEYJ103V	10K 1/10W	1	[M]
R455	ERJ6GEYJ103V	10K 1/10W	1	[M]
R456	ERJ6GEYJ472V	4.7K 1/10W	1	[M]
R501	ERDS2TJ472T	4.7K 1/4W	1	[M]
R502	ERDS2TJ472T	4.7K 1/4W	1	[M]
R503	ERDS2TJ152T	1.5K 1/4W	1	[M]
R504	ERDS2TJ152T	1.5K 1/4W	1	[M]
R505	ERDS2TJ272T	2.7K 1/4W	1	[M]
R506	ERDS2TJ272T	2.7K 1/4W	1	[M]
R507	ERDS2TJ472T	4.7K 1/4W	1	[M]
R508	ERDS2TJ472T	4.7K 1/4W	1	[M]
R509	ERDS2TJ272T	2.7K 1/4W	1	[M]
R512	ERDS2TJ272T	2.7K 1/4W	1	[M]
R513	ERDS2TJ472T	4.7K 1/4W	1	[M]
R516	ERDS2TJ272T	2.7K 1/4W	1	[M]
R517	ERDS2TJ472T	4.7K 1/4W	1	[M]
R520	ERDS2TJ272T	2.7K 1/4W	1	[M]
R521	ERDS2TJ221T	220 1/4W	1	[M]
R524	ERDS2TJ472T	4.7K 1/4W	1	[M]
R527	ERDS2TJ152T	1.5K 1/4W	1	[M]
R529	ERD2FCVJ4R7T	4.7 1/4W	1	[M] ⚠
R532	ERDS2TJ563T	56K 1/4W	1	[M]
R533	ERDS2TJ563T	56K 1/4W	1	[M]
R534	ERDS2TJ563T	56K 1/4W	1	[M]
R535	ERDS2TJ563T	56K 1/4W	1	[M]
R536	ERDS2TJ563T	56K 1/4W	1	[M]
R537	ERDS2TJ563T	56K 1/4W	1	[M]
R546	ERDS2TJ474T	470K 1/4W	1	[M]
R551	ERDS2TJ222T	2.2K 1/4W	1	[M]
R552	ERDS1FVJ2R2T	2.2 1/2W	1	[M] ⚠
R553	ERDS1FVJ2R2T	2.2 1/2W	1	[M] ⚠
R554	ERDS2TJ102T	1K 1/4W	1	[M]
R555	ERDS2TJ124T	120K 1/4W	1	[M]
R556	ERDS2TJ224T	220K 1/4W	1	[M]
R557	ERDS2TJ124T	120K 1/4W	1	[M]
R558	ERDS2TJ154T	150K 1/4W	1	[M]
R559	ERDS2TJ184T	180K 1/4W	1	[M]
R560	ERDS2TJ124T	120K 1/4W	1	[M]
R561	ERDS2TJ103T	10K 1/4W	1	[M]
R562	ERDS2TJ822T	8.2K 1/4W	1	[M]
R563	ERDS2TJ103T	10K 1/4W	1	[M]
R565	RSFMB40KT-L	FUSE PROTECTOR	1	[M] ⚠
R567	ERDS2TJ104T	100K 1/4W	1	[M]
R568	ERDS2TJ223T	22K 1/4W	1	[M]
R569	ERDS2TJ392T	3.9K 1/4W	1	[M]
R571	ERD2FCVG390T	39 1/4W	1	[M] ⚠
R572	ERDS1FVJ2R2T	2.2 1/2W	1	[M] ⚠

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
R574	ERDS1FVJ272T	2.7K 1/2W	1	[M] ⚠
R575	ERDS1FVJ470T	47 1/2W	1	[M] ⚠
R576	ERDS1FVJ470T	47 1/2W	1	[M] ⚠
R577	ERDS1FVJ2R2T	2.2 1/2W	1	[M] ⚠
R578	ERDS2TJ332T	3.3K 1/4W	1	[M]
R583	ERDS1FVJ100T	10 1/2W	1	[M] ⚠
R584	ERDS1FVJ100T	10 1/2W	1	[M] ⚠
R585	ERDS1FVJ100T	10 1/2W	1	[M] ⚠
R586	ERDS1FVJ100T	10 1/2W	1	[M] ⚠
R587	ERDS1FVJ100T	10 1/2W	1	[M] ⚠
R588	ERDS1FVJ100T	10 1/2W	1	[M] ⚠
R590	ERDS2TJ152T	1.5K 1/4W	1	[M]
R591	ERDS2TJ152T	1.5K 1/4W	1	[M]
R593	ERDS2TJ824T	820K 1/4W	1	[M]
R594	ERDS1FVJ332T	3.3K 1/2W	1	[M]
R598	ERDS2TJ471T	470 1/4W	1	[M]
R599	ERDS2TJ472T	4.7K 1/4W	1	[M]
R601	ERDS2TJ331T	330 1/4W	1	[M]
R601A	ERDS2TJ472T	4.7K 1/4W	1	[M]
R602	ERDS2TJ331T	330 1/4W	1	[M]
R603	ERDS2TJ331T	330 1/4W	1	[M]
R604	ERDS2TJ331T	330 1/4W	1	[M]
R605	ERDS2TJ331T	330 1/4W	1	[M]
R606	ERDS2TJ102T	1K 1/4W	1	[M]
R607	ERDS2TJ102T	1K 1/4W	1	[M]
R608	ERDS2TJ122T	1.2K 1/4W	1	[M]
R609	ERDS2TJ182T	1.8K 1/4W	1	[M]
R610	ERDS2TJ222T	2.2K 1/4W	1	[M]
R611	ERDS2TJ272T	2.7K 1/4W	1	[M]
R612	ERDS2TJ472T	4.7K 1/4W	1	[M]
R613	ERDS2TJ682T	6.8K 1/4W	1	[M]
R614	ERDS2TJ103T	10K 1/4W	1	[M]
R615	ERDS2TJ223T	22K 1/4W	1	[M]
R616	ERDS2TJ683T	68K 1/4W	1	[M]
R617	ERDS2TJ102T	1K 1/4W	1	[M]
R618	ERDS2TJ102T	1K 1/4W	1	[M]
R619	ERDS2TJ122T	1.2K 1/4W	1	[M]
R620	ERDS2TJ182T	1.8K 1/4W	1	[M]
R621	ERDS2TJ222T	2.2K 1/4W	1	[M]
R622	ERDS2TJ272T	2.7K 1/4W	1	[M]
R623	ERDS2TJ472T	4.7K 1/4W	1	[M]
R624	ERDS2TJ682T	6.8K 1/4W	1	[M]
R625	ERDS2TJ103T	10K 1/4W	1	[M]
R626	ERDS2TJ223T	22K 1/4W	1	[M]
R627	ERDS2TJ101T	100 1/4W	1	[M]
R628	ERDS2TJ331T	330 1/4W	1	[M]
R629	ERDS2TJ123T	12K 1/4W	1	[M]
R630	ERDS2TJ223T	22K 1/4W	1	[M]
R633	ERDS2TJ102T	1K 1/4W	1	[M]
R635	ERDS2TJ102T	1K 1/4W	1	[M]
R641	ERDS2TJ562T	5.6K 1/4W	1	[M]
R642	ERDS2TJ472T	4.7K 1/4W	1	[M]

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
R643	ERDS2TJ392T	3.9K 1/4W	1	[M]
R648	ERDS2TJ272T	2.7K 1/4W	1	[M]
R650	ERDS2TJ472T	4.7K 1/4W	1	[M]
R651	ERDS2TJ222T	2.2K 1/4W	1	[M]
R652	ERDS2TJ272T	2.7K 1/4W	1	[M]
R653	ERDS2TJ222T	2.2K 1/4W	1	[M]
R654	ERDS2TJ472T	4.7K 1/4W	1	[M]
R655	ERDS2TJ182T	1.8K 1/4W	1	[M]
R656	ERDS2TJ222T	2.2K 1/4W	1	[M]
R657	ERDS2TJ101T	100 1/4W	1	[M]
R658	ERDS2TJ122T	1.2K 1/4W	1	[M]
R659	ERDS2TJ182T	1.8K 1/4W	1	[M]
R661	ERDS2TJ391T	390 1/4W	1	[M]
R665	ERDS2TJ102T	1K 1/4W	1	[M]
R666	ERDS2TJ122T	1.2K 1/4W	1	[M]
R667	ERDS2TJ102T	1K 1/4W	1	[M]
R668	ERDS2TJ102T	1K 1/4W	1	[M]
R671	ERDS2TJ103T	10K 1/4W	1	[M]
R672	ERDS2TJ104T	100K 1/4W	1	[M]
R673	ERDS2TJ104T	100K 1/4W	1	[M]
R674	ERDS2TJ104T	100K 1/4W	1	[M]
R675	ERDS2TJ104T	100K 1/4W	1	[M]
R676	ERDS2TJ104T	100K 1/4W	1	[M]
R677	ERDS2TJ102T	1K 1/4W	1	[M]
R678	ERDS2TJ102T	1K 1/4W	1	[M]
R680	ERDS2TJ152T	1.5K 1/4W	1	[M]
R681	ERDS2TJ104T	100K 1/4W	1	[M]
R682	ERDS2TJ104T	100K 1/4W	1	[M]
R683	ERDS2TJ104T	100K 1/4W	1	[M]
R684	ERDS2TJ104T	100K 1/4W	1	[M]
R685	ERDS2TJ104T	100K 1/4W	1	[M]
R686	ERDS2TJ104T	100K 1/4W	1	[M]
R687	ERDS2TJ223T	22K 1/4W	1	[M]
R688	ERDS2TJ102T	1K 1/4W	1	[M]
R689	ERDS2TJ104T	100K 1/4W	1	[M]
R691	ERDS2TJ223T	22K 1/4W	1	[M]
R692	ERDS2TJ104T	100K 1/4W	1	[M]
R693	ERDS2TJ470T	47 1/4W	1	[M]
R694	ERDS2TJ472T	4.7K 1/4W	1	[M]
R695	ERDS2TJ331T	330 1/4W	1	[M]
R696	ERDS2TJ103T	10K 1/4W	1	[M]
R697	ERDS2TJ331T	330 1/4W	1	[M]
R698	ERDS2TJ103T	10K 1/4W	1	[M]
R699	ERDS2TJ103T	10K 1/4W	1	[M]
R701	ERJ6GEYJ4R7A	4.7 1/10W	1	[M]
R702	ERJ6GEYJ103A	10K 1/10W	1	[M]
R704	ERJ6GEYJ102A	1K 1/10W	1	[M]
R705	ERJ6GEYJ154A	150K 1/10W	1	[M]
R706	ERJ6GEYJ102A	1K 1/10W	1	[M]
R707	ERJ6GEYJ393V	39K 1/10W	1	[M]
R708	ERJ6GEYJ223A	22K 1/10W	1	[M]
R709	ERJ6GEYJ683A	68K 1/10W	1	[M]
R711	ERJ6GEYJ823A	82K 1/10W	1	[M]
R712	ERJ8GEYJ221A	220 1/8W	1	[M]

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
R714	ERJ6GEY0R00A	0 1/10W	1	[M]
R715	ERJ6GEYJ102A	1K 1/10W	1	[M]
R717	ERJ6GEYJ102A	1K 1/10W	1	[M]
R718	ERJ6GEYJ102A	1K 1/10W	1	[M]
R721	ERJ6GEYJ101A	100 1/10W	1	[M]
R723	ERJ6GEYJ682A	6.8K 1/10W	1	[M]
R724	ERJ6GEYJ183A	18K 1/10W	1	[M]
R725	ERJ6GEYJ391A	390 1/10W	1	[M]
R727	ERJ6GEYJ392A	3.9K 1/10W	1	[M]
R728	ERJ6GEYJ392A	3.9K 1/10W	1	[M]
R729	ERJ6GEYJ392A	3.9K 1/10W	1	[M]
R731	ERJ6GEYJ682A	6.8K 1/10W	1	[M]
R735	ERJ6GEYJ101A	100 1/10W	1	[M]
R736	ERJ6GEYJ101A	100 1/10W	1	[M]
R741	ERJ6GEYJ473A	47K 1/10W	1	[M]
R742	ERJ6GEYJ224A	220K 1/10W	1	[M]
R744	ERJ6GEYJ124A	120K 1/10W	1	[M]
R749	ERJ6GEYJ472A	4.7K 1/10W	1	[M]
R750	ERJ8GEYJ5R6V	5.6 1/8W	1	[M]
R753	ERJ6GEYJ100V	10 1/10W	1	[M]
R801	ERJ6GEYJ393V	39K 1/10W	1	[M]
R802	ERJ6GEYJ393V	39K 1/10W	1	[M]
R803	ERJ6GEYJ221V	220 1/10W	1	[M]
R804	ERJ6GEYJ102V	1K 1/10W	1	[M]
R805	ERJ6GEYJ563V	56K 1/10W	1	[M]
R806	ERJ6GEYJ473V	47K 1/10W	1	[M]
R807	ERJ6GEYJ561V	560 1/10W	1	[M]
R808	ERJ6GEYJ221V	220 1/10W	1	[M]
R822	ERJ6GEYJ102V	1K 1/10W	1	[M]
R823	ERJ6GEYJ105V	1M 1/10W	1	[M]
R826	ERJ6GEYJ222V	2.2K 1/10W	1	[M]
R827	ERJ6GEYJ222V	2.2K 1/10W	1	[M]
R835	ERJ6GEYJ183V	18K 1/10W	1	[M]
R836	ERJ6GEYJ222V	2.2K 1/10W	1	[M]
R843	ERJ6GEYJ102V	1K 1/10W	1	[M]
R844	ERJ6GEYJ102V	1K 1/10W	1	[M]
R847	ERJ6GEYJ472V	4.7K 1/10W	1	[M]
R848	ERJ6GEYJ472V	4.7K 1/10W	1	[M]
R855	ERJ6GEYJ682V	6.8K 1/10W	1	[M]
R856	ERJ6GEYJ223V	22K 1/10W	1	[M]
R857	ERJ6GEYJ223V	22K 1/10W	1	[M]
R858	ERJ6GEYJ222V	2.2K 1/10W	1	[M]
R859	ERJ6GEYJ121V	120 1/10W	1	[M]
R860	ERJ6GEYJ121V	120 1/10W	1	[M]
R863	ERJ6GEYJ105V	1M 1/10W	1	[M]
R864	ERJ6GEYJ105V	1M 1/10W	1	[M]
R865	ERJ6GEYJ102V	1K 1/10W	1	[M]
R866	ERJ6GEYJ222V	2.2K 1/10W	1	[M]
R867	ERJ6GEYJ222V	2.2K 1/10W	1	[M]
R868	ERJ6GEYJ102V	1K 1/10W	1	[M]
R871	ERJ6GEYJ222V	2.2K 1/10W	1	[M]
R872	ERJ6GEYJ221V	220 1/10W	1	[M]
R874	ERJ6GEYJ104V	100K 1/10W	1	[M]
R876	ERJ6GEYJ221V	220 1/10W	1	[M]

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
R877	ERJ6GEYJ223V	22K 1/10W	1	[M]
R878	ERJ6GEYJ102V	1K 1/10W	1	[M]
R879	ERJ6GEYJ223V	22K 1/10W	1	[M]
R880	ERJ6GEYJ102V	1K 1/10W	1	[M]
R890	ERJ6GEYJ561V	560 1/10W	1	[M]
R892	ERJ6GEYJ393V	39K 1/10W	1	[M]
R900	ERDS2TJ331T	330 1/4W	1	[M]
R901	ERDS2TJ223T	22K 1/4W	1	[M]
R902	ERDS2TJ103T	10K 1/4W	1	[M]
R903	ERDS2TJ331T	330 1/4W	1	[M]
R904	ERDS2TJ101T	100 1/4W	1	[M]
R905	ERDS2TJ101T	100 1/4W	1	[M]
R906	ERDS2TJ101T	100 1/4W	1	[M]
R907	ERDS2TJ101T	100 1/4W	1	[M]
R909	ERDS2TJ331T	330 1/4W	1	[M]
R910	ERDS2TJ681T	680 1/4W	1	[M]
R911	ERDS2TJ472T	4.7K 1/4W	1	[M]
R912	ERDS2TJ472T	4.7K 1/4W	1	[M]
R913	ERDS2TJ103T	10K 1/4W	1	[M]
R914	ERDS2TJ103T	10K 1/4W	1	[M]
R915	ERDS2TJ123T	12K 1/4W	1	[M]
R916	ERDS2TJ223T	22K 1/4W	1	[M]
R917	ERDS2TJ101T	100 1/4W	1	[M]
R918	ERDS2TJ224T	220K 1/4W	1	[M]
R919	ERDS2TJ103T	10K 1/4W	1	[M]
R920	ERDS2TJ101T	100 1/4W	1	[M]
R923	ERDS2TJ101T	100 1/4W	1	[M]
R926	ERDS2TJ473T	47K 1/4W	1	[M]
R929	ERDS2TJ104T	100K 1/4W	1	[M]
R932	ERDS2TJ104T	100K 1/4W	1	[M]
R935	ERDS2TJ104T	100K 1/4W	1	[M]
R938	ERDS2TJ680T	68 1/4W	1	[M]
R939	ERDS2TJ681T	680 1/4W	1	[M]
R940	ERDS2TJ106T	10M 1/4W	1	[M]
R941	ERDS2TJ101T	100 1/4W	1	[M]
R942	ERDS2TJ680T	68 1/4W	1	[M]
R943	ERDS2TJ334T	330K 1/4W	1	[M]
R944	ERDS2TJ562T	5.6K 1/4W	1	[M]
R947	ERDS2TJ101T	100 1/4W	1	[M]
R948	ERDS2TJ102T	1K 1/4W	1	[M]
R949	ERDS2TJ223T	22K 1/4W	1	[M]
R950	ERDS2TJ103T	10K 1/4W	1	[M]
R951	ERDS2TJ103T	10K 1/4W	1	[M]
R952A	ERDS2TJ103T	10K 1/4W	1	[M]
R952	ERDS2TJ821T	820 1/4W	1	[M]
R953	ERDS2TJ393T	39K 1/4W	1	[M]
R955	ERDS2TJ474T	470K 1/4W	1	[M]
R956	ERDS2TJ103T	10K 1/4W	1	[M]
R957	ERDS2TJ223T	22K 1/4W	1	[M]
R958	ERDS2TJ472T	4.7K 1/4W	1	[M]
R959	ERDS2TJ472T	4.7K 1/4W	1	[M]
R960	ERDS2TJ471T	470 1/4W	1	[M]
R961	ERDS2TJ472T	4.7K 1/4W	1	[M]
R962	ERDS2TJ103T	10K 1/4W	1	[M]

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
R963	ERDS2TJ103T	10K 1/4W	1	[M]
R964	ERDS2TJ223T	22K 1/4W	1	[M]
R965	ERDS2TJ103T	10K 1/4W	1	[M]
R966	ERDS2TJ472T	4.7K 1/4W	1	[M]
R967	ERDS2TJ223T	22K 1/4W	1	[M]
R968	ERDS2TJ101T	100 1/4W	1	[M]
R969	ERDS2TJ101T	100 1/4W	1	[M]
R970	ERDS2TJ101T	100 1/4W	1	[M]
R971	ERDS2TJ102T	1K 1/4W	1	[M]
R972A	ERDS2TJ102T	1K 1/4W	1	[M]
R972	ERDS2TJ821T	820 1/4W	1	[M]
R973A	ERDS2TJ104T	100K 1/4W	1	[M]
R973	ERDS2TJ393T	39K 1/4W	1	[M]
R974	ERDS2TJ103T	10K 1/4W	1	[M]
R975	ERDS2TJ104T	100K 1/4W	1	[M]
R976A	ERDS2TJ103T	10K 1/4W	1	[M]
R976	ERDS2TJ103T	10K 1/4W	1	[M]
R977	ERDS2TJ104T	100K 1/4W	1	[M]
R978	ERDS2TJ102T	1K 1/4W	1	[M]
R978A	ERDS2TJ103T	10K 1/4W	1	[M]
R979A	ERDS2TJ103T	10K 1/4W	1	[M]
R979	RSFMB40KT-L	FUSE PROTECTOR	1	[M] ⚠
R980	ERDS1FVJ180T	18 1/2W	1	[M] ⚠
R980A	ERDS2TJ103T	10K 1/4W	1	[M]
R981	ERDS1FVJ180T	18 1/2W	1	[M]
R981	ERDS2TJ103T	10K 1/4W	1	[M]
R982	ERDS2TJ562T	5.6K 1/4W	1	[M]
R983	ERDS2TJ222T	2.2K 1/4W	1	[M]
R983A	ERDS2TJ562T	5.6K 1/4W	1	[M]
R984	ERDS2TJ151T	150 1/4W	1	[M]
R984A	ERDS2TJ562T	5.6K 1/4W	1	[M]
R985	ERDS1FVJ220T	22 1/2W	1	[M] ⚠
R1101	ERJ6GEYJ334A	330K 1/10W	1	[M]
R1102	ERJ6GEYJ104A	100K 1/10W	1	[M]
R1103	ERJ6GEYJ153A	15K 1/10W	1	[M]
R1104	ERJ6GEYJ153A	15K 1/10W	1	[M]
R1105	ERJ6GEYJ271A	270 1/10W	1	[M]
R1106	ERJ6GEYJ222A	2.2K 1/10W	1	[M]
R1107	ERJ6GEYJ390A	39 1/10W	1	[M]
R1108	ERJ6GEYJ390A	39 1/10W	1	[M]
R1109	ERJ6GEYJ432A	4.3K 1/10W	1	[M]
R1110	ERJ6GEYJ432A	4.3K 1/10W	1	[M]
R1111	ERJ6GEYJ222A	2.2K 1/10W	1	[M]
R1112	ERJ6GEYJ222A	2.2K 1/10W	1	[M]
R1115	ERJ6GEYJ394A	390K 1/10W	1	[M]
R1116	ERJ6GEYJ394A	390K 1/10W	1	[M]
R1117	ERJ6GEYJ274A	270K 1/10W	1	[M]
R1118	ERJ6GEYJ274A	270K 1/10W	1	[M]
R1121	ERJ6GEYJ333A	33K 1/10W	1	[M]
R1122	ERJ6GEYJ333A	33K 1/10W	1	[M]
R1123	ERJ6GEYJ103A	10K 1/10W	1	[M]
R1124	ERJ6GEYJ103A	10K 1/10W	1	[M]
R1125	ERJ6GEYJ102A	1K 1/10W	1	[M]

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
R1126	ERJ6GEYJ102A	1K 1/10W	1	[M]
R1131	ERJ6GEYJ683A	68K 1/10W	1	[M]
R1132	ERJ6GEYJ335A	3.3M 1/10W	1	[M]
R1133	ERJ6GEYJ332A	3.3K 1/10W	1	[M]
R1134	ERJ6GEYJ474A	470K 1/10W	1	[M]
R1139	ERJ6GEYJ103A	10K 1/10W	1	[M]
R1141	ERJ6GEYJ682A	6.8K 1/10W	1	[M]
R1142	ERJ6GEYJ682A	6.8K 1/10W	1	[M]
R1143	ERJ6GEYJ103A	10K 1/10W	1	[M]
R1144	ERJ6GEYJ103A	10K 1/10W	1	[M]
R1145	ERJ6GEYJ103A	10K 1/10W	1	[M]
R1146	ERJ6GEYJ103A	10K 1/10W	1	[M]
R1151	ERJ6GEYJ105A	1M 1/10W	1	[M]
R1152	ERJ6GEYJ105A	1M 1/10W	1	[M]
R1153	ERJ6GEYJ122A	1.2K 1/10W	1	[M]
R1154	ERJ6GEYJ122A	1.2K 1/10W	1	[M]
R1155	ERJ6GEYJ221A	220 1/10W	1	[M]
R1156	ERJ6GEYJ221A	220 1/10W	1	[M]
R1158	ERJ6GEYJ221A	220 1/10W	1	[M]
R1161	ERJ8GEYJ472A	4.7K 1/8W	1	[M]
R1162	ERJ6GEYJ472A	4.7K 1/10W	1	[M]
R1165	ERJ6GEYJ563A	56K 1/10W	1	[M]
R1166	ERJ6GEYJ104A	100K 1/10W	1	[M]
R1167	ERJ6GEYJ470A	47 1/10W	1	[M]
R1170	ERJ6GEYJ102A	1K 1/10W	1	[M]
R1172	ERJ6GEYJ331A	330 1/10W	1	[M]
R1173	ERJ6GEYJ103A	10K 1/10W	1	[M]
R1174	ERJ6GEYJ103A	10K 1/10W	1	[M]
R1176	ERJ6GEYJ472A	4.7K 1/10W	1	[M]
R1177	ERJ6GEYJ562A	5.6K 1/10W	1	[M]
R1178	ERJ6GEYJ1R2A	1.2 1/10W	1	[M]
R1179	ERJ6GEYJ272A	2.7K 1/10W	1	[M]
R1180	ERJ6GEYJ272A	2.7K 1/10W	1	[M]
R1181	ERJ6GEYJ332A	3.3K 1/10W	1	[M]
R1182	ERJ6GEYJ1R0A	1 1/10W	1	[M]
R1183	ERJ6GEYJ104A	100K 1/10W	1	[M]
R1184	ERJ6GEYJ104A	100K 1/10W	1	[M]
R1186	ERJ6GEYJ102A	1K 1/10W	1	[M]
R1188	ERJ6GEYJ102A	1K 1/10W	1	[M]
R1189	ERJ6GEYJ472A	4.7K 1/10W	1	[M]
R1190	ERJ6GEYJ104A	100K 1/10W	1	[M]
R1191	ERJ6GEYJ563A	56K 1/10W	1	[M]
R1192	ERJ6GEYJ470A	47 1/10W	1	[M]
R1195	ERJ6GEYJ104A	100K 1/10W	1	[M]
R1196	ERJ6GEYJ473A	47K 1/10W	1	[M]
R1197	ERJ6GEYJ473A	47K 1/10W	1	[M]
R1206	ERJ6GEYJ221A	220 1/10W	1	[M]
R1213	ERJ6GEYJ152A	1.5K 1/10W	1	[M]
R1215	ERJ6GEYJ222A	2.2K 1/10W	1	[M]
R1216	ERJ6GEYJ222A	2.2K 1/10W	1	[M]
R1220	ERJ8GEYJ472A	4.7K 1/8W	1	[M]
R1221	ERJ6GEYJ2R7A	2.7 1/10W	1	[M]
R1225	ERJ6GEYJ2R7A	2.7 1/10W	1	[M]
R1226	ERJ6GEYJ102A	1K 1/10W	1	[M]

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
R1227	ERJ6GEYJ102A	1K 1/10W	1	[M]
R1230	ERJ6GEYJ472A	4.7K 1/10W	1	[M]
R1232	ERJ6GEYJ102A	1K 1/10W	1	[M]
R1233	ERJ6GEYJ222A	2.2K 1/10W	1	[M]
R1234	ERJ6GEYJ472A	4.7K 1/10W	1	[M]
R1235	ERJ6GEYJ472A	4.7K 1/10W	1	[M]
R1236	ERJ6GEYJ472A	4.7K 1/10W	1	[M]
		CAPACITORS		
C1A	ECBT1H5R6KC5	5.6P 50V	1	[M]
C1	ECEA1CKA101B	100 16V	1	[M]
C2	ECBT1E103ZF5	0.01 25V	1	[M]
C2A	RCBS1H102KBY	1000P 50V	1	[M]
C3	ECBT1H2R2KC5	2.2P 50V	1	[M]
C4	ECBT1H181KB5	180P 50V	1	[M]
C5	ECBT1H5R6KC5	5.6P 50V	1	[M]
C6	ECBT1H3R3KC5	3.3P 50V	1	[M]
C7	ECBT1H4R7KC5	4.7P 50V	1	[M]
C8	ECBT1H3R3KC5	3.3P 50V	1	[M]
C9	ECBT1H2R2KC5	2.2P 50V	1	[M]
C10	ECBT1H180JC5	18P 50V	1	[M]
C11	RCBS1H102KBY	1000P 50V	1	[M]
C101	ECUV1H103KBN	0.01 50V	1	[M]
C102	ECEA1CKA100B	10 16V	1	[M]
C103	ECUV1H103KBN	0.01 50V	1	[M]
C104	ECUV1H102KBN	1000P 50V	1	[M]
C106	ECUV1H103KBN	0.01 50V	1	[M]
C107	ECUV1E473ZFN	0.047 25V	1	[M]
C108	ECUV1H080DCN	8P 50V	1	[M]
C109	ECUV1H102KBN	1000P 50V	1	[M]
C110	ECUV1H103KBN	0.01 50V	1	[M]
C111	ECEA1EKA4R7B	4.7 25V	1	[M]
C112	ECUV1H103KBN	0.01 50V	1	[M]
C113	ECUV1H102KBN	1000P 50V	1	[M]
C114	ECEA1HKA3R3B	3.3 50V	1	[M]
C115	ECEA1EKA4R7B	4.7 25V	1	[M]
C116	ECUVNE333KBN	0.033 25V	1	[M]
C117	ECUV1H103KBN	0.01 50V	1	[M]
C118	ECUV1H103KBN	0.01 50V	1	[M]
C119	ECQP2A681JZT	680P 100V	1	[M]
C120	ECEA1CKA100B	10 16V	1	[M]
C121	ECEA1HKAR47B	0.47 50V	1	[M]
C122	ECEA1HKA010B	1 50V	1	[M]
C123	ECEA1HKA010B	1 50V	1	[M]
C124	ECUV1H101KCN	100P 50V	1	[M]
C125	ECEA1CKA220B	22 16V	1	[M]
C126	ECUVNC105ZFN	10 16V	1	[M]
C127	ECEA1CKA220B	22 16V	1	[M]
C129	ECEA0JKA101B	100 6.3V	1	[M]
C130	ECEA0JKA101B	100 6.3V	1	[M]
C131	ECUV1H151KCN	150P 50V	1	[M]
C132	ECUV1H102KBN	1000P 50V	1	[M]
C133	ECUV1H270JCN	27P 50V	1	[M]

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
C134	ECUV1H270JCN	27P 50V	1	[M]
C136	ECUV1H102KBN	1000P 50V	1	[M]
C137	ECUV1H332KBN	3300P 50V	1	[M]
C138	ECUV1H103KBN	0.01 50V	1	[M]
C139	ECEA1EKA4R7B	4.7 25V	1	[M]
C141	ECEA1HKA010B	1 50V	1	[M]
C142	ECEA1HKA010B	1 50V	1	[M]
C143	ECUV1H682KBN	6800P 50V	1	[M]
C144	ECUV1H682KBN	6800P 50V	1	[M]
C147	ECUV1H102KBN	1000P 50V	1	[M]
C148	ECUV1H103KBN	0.01 50V	1	[M]
C149	ECUV1E104ZFN	0.1 25V	1	[M]
C201	ECUZ1H101JCN	100P 50V	1	[M]
C202	ECUZ1H101JCN	100P 50V	1	[M]
C204	ECUV1H221KBN	220P 50V	1	[M]
C207	ECEA1HKA010B	1 50V	1	[M]
C208	ECUZ1E563KBN	0.056 25V	1	[M]
C209	ECEA1HKAR15B	0.15 50V	1	[M]
C210	ECUZ1E223KBN	0.022 25V	1	[M]
C211	ECUZNC393KBN	0.039 16V	1	[M]
C212	ECUZ1E223KBN	0.022 25V	1	[M]
C213	ECUZ1H332KBN	3300P 50V	1	[M]
C214	ECUZ1H222KBN	2200P 50V	1	[M]
C215	ECUZ1H272KBN	2700P 50V	1	[M]
C216	ECUZ1H152KBN	1500P 50V	1	[M]
C217	ECUZ1C333KBN	0.033 16V	1	[M]
C218	ECEA1HKAR15B	0.15 50V	1	[M]
C219	ECEA1HKAR15B	0.15 50V	1	[M]
C220	ECUZ1H102KBN	1000P 50V	1	[M]
C221	ECUZNC683KBN	0.068 16V	1	[M]
C222	ECUZ1H471KBN	470P 50V	1	[M]
C223	ECEA1CKA100B	10 16V	1	[M]
C224	ECEA1HKA3R3B	3.3 50V	1	[M]
C225	ECEA1HKA3R3B	3.3 50V	1	[M]
C226	ECUZ1E104MBN	0.1 25V	1	[M]
C227	ECUV1H681KBV	680P 50V	1	[M]
C228	ECEA1CKA100B	10 16V	1	[M]
C229	ECUZ1H101JCN	100P 50V	1	[M]
C230	ECUZ1H470JCN	47P 50V	1	[M]
C232	ECUV1H332KBN	3300P 50V	1	[M]
C233	ECEA1CKA100B	10 16V	1	[M]
C234	ECUZNC683KBN	0.068 16V	1	[M]
C235	ECUZ1E183KBN	0.018 25V	1	[M]
C236	ECUZ1C474ZFN	0.47 16V	1	[M]
C237	ECUZ1H102KBN	1000P 50V	1	[M]
C240	ECEA1HKA010B	1 50V	1	[M]
C241	ECUZ1H101JCN	100P 50V	1	[M]
C242	ECEA1HKA3R3B	3.3 50V	1	[M]
C300	ECUZ1C103KBN	0.01 16V	1	[M]
C301	ECUZ1H102KBN	1000P 50V	1	[M]
C304	ECEA1AM331B	330 10V	1	[M]
C305	ECUZ1H152KBN	1500P 50V	1	[M]
C306	ECEA1HKA0R1B	0.1 50V	1	[M]
C307	ECUZ1H102KBN	1000P 50V	1	[M]

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
C308	ECUZ1E473ZFN	0.047 25V	1	[M]
C312	ECUZ1E104ZFN	0.1 25V	1	[M]
C313	ECUZ1E104ZFN	0.1 25V	1	[M]
C314	ECUV1H151KCN	150P 50V	1	[M]
C315	ECUV1H151KCN	150P 50V	1	[M]
C316	ECUV1H151KCN	150P 50V	1	[M]
C317	ECEA1HKA010B	1 50V	1	[M]
C318	ECUZ1C103KBN	0.01 16V	1	[M]
C320	ECUZ1C103KBN	0.01 16V	1	[M]
C321	ECEA1AKA330B	33 10V	1	[M]
C322	ECUZNC683KBN	0.068 16V	1	[M]
C323	ECUZ1E473ZFN	0.047 25V	1	[M]
C324	ECEA1AKA470B	47 10V	1	[M]
C325	ECEA1AKA470B	47 10V	1	[M]
C326	ECUV1H472KBN	4700P 50V	1	[M]
C327	ECUZ1C154KBN	0.15 16V	1	[M]
C328	ECUZNC683KBN	0.068 16V	1	[M]
C329	ECUZ1E104ZFN	0.1 25V	1	[M]
C331	ECEA1HKA4R7B	4.7 50V	1	[M]
C334	ECEA1HKA3R3B	3.3 50V	1	[M]
C381	ECUZ1H222KBN	2200P 50V	1	[M]
C382	ECUZ1H222KBN	2200P 50V	1	[M]
C383	ECEA1CKA100B	10 16V	1	[M]
C384	ECEA1CKA100B	10 16V	1	[M]
C401	ECUZ1H101JCN	100P 50V	1	[M]
C402	ECUZ1H101JCN	100P 50V	1	[M]
C404	ECUV1H221KBN	220P 50V	1	[M]
C407	ECEA1HKA010B	1 50V	1	[M]
C408	ECUZ1E563KBN	0.056 25V	1	[M]
C409	ECEA1HKAR15B	0.15 50V	1	[M]
C410	ECUZ1E223KBN	0.022 25V	1	[M]
C411	ECUZNC393KBN	0.039 16V	1	[M]
C412	ECUZ1E223KBN	0.022 25V	1	[M]
C413	ECUV1H332KBN	3300P 50V	1	[M]
C414	ECUZ1H222KBN	2200P 50V	1	[M]
C415	ECUZ1H272KBN	2700P 50V	1	[M]
C416	ECUZ1H152KBN	1500P 50V	1	[M]
C417	ECUZ1C333KBN	0.033 16V	1	[M]
C418	ECEA1HKAR15B	0.15 50V	1	[M]
C419	ECEA1HKAR15B	0.15 50V	1	[M]
C420	ECUZ1H102KBN	1000P 50V	1	[M]
C421	ECUZNC683KBN	0.068 16V	1	[M]
C422	ECUZ1H471KBN	470P 50V	1	[M]
C423	ECEA1CKA100B	10 16V	1	[M]
C424	ECEA1HKA3R3B	3.3 50V	1	[M]
C425	ECEA1HKA3R3B	3.3 50V	1	[M]
C426	ECUZ1E104MBN	0.1 25V	1	[M]
C427	ECUV1H681KBV	680P 50V	1	[M]
C428	ECEA1CKA100B	10 16V	1	[M]
C429	ECUZ1H101JCN	100P 50V	1	[M]
C430	ECUZ1H470JCN	47P 50V	1	[M]
C432	ECUV1H332KBN	3300P 50V	1	[M]
C433	ECEA1CKA100B	10 16V	1	[M]
C434	ECUZNC683KBN	0.068 16V	1	[M]

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
C435	ECUZ1E183KBN	0.018 25V	1	[M]
C436	ECUZ1H101JCN	100P 50V	1	[M]
C437	ECUZ1H102KBN	1000P 50V	1	[M]
C440	ECEA1HKA010B	1 50V	1	[M]
C441	ECUZ1H101JCN	100P 50V	1	[M]
C442	ECEA1HKA3R3B	3.3 50V	1	[M]
C500	ECBT1H471KB5	470P 50V	1	[M]
C501	ECBT1H104ZF5	0.1 50V	1	[M]
C502	ECBT1H104ZF5	0.1 50V	1	[M]
C503	ECBT1H471KB5	470P 50V	1	[M]
C508	ECBT1H471KB5	470P 50V	1	[M]
C509	ECBT1H103KB5	0.01 50V	1	[M]
C510	ECBT1H471KB5	470P 50V	1	[M]
C511	ECBT1H471KB5	470P 50V	1	[M]
C512	ECEA2AM100B	10 100V	1	[M]
C513	ECKR1H103ZF5	0.01 50V	1	[M]
C514	ECBT1H471KB5	470P 50V	1	[M]
C516	ECKR1H103ZF5	0.01 50V	1	[M]
C521	ECKR1H103ZF5	0.01 50V	1	[M]
C523	ECEA1HKA010B	1 50V	1	[M]
C526	ECBT1H150JC5	15P 50V	1	[M]
C527	ECBT1H150JC5	15P 50V	1	[M]
C528	ECBT1H150JC5	15P 50V	1	[M]
C529	ECBT1H150JC5	15P 50V	1	[M]
C530	ECBT1H220JC5	22P 50V	1	[M]
C531	ECBT1H220JC5	22P 50V	1	[M]
C533	ECKR1H103ZF5	0.01 50V	1	[M]
C534	ECEA1CKA470B	47 16V	1	[M]
C539	ECBT1H473ZF5	0.047 50V	1	[M]
C540	ECQV1H104JZ3	0.1 50V	1	[M]
C543	ECEA1JM101B	100 63V	1	[M]
C544	ECBT1H103KB5	0.01 50V	1	[M] ⚠
C546	ECEA1AKA330B	33 10V	1	[M]
C547	ECEA1CKA100B	10 16V	1	[M]
C548	ECEA1HKA2R2B	2.2 50V	1	[M]
C549	ECEA2AU100B	10 100V	1	[M]
C550	ECEA1VM101B	100 35V	1	[M]
C551	ECEA1HKA2R2B	2.2 50V	1	[M]
C552	ECKR1H103ZF5	0.01 50V	1	[M]
C553	ECEA1VM101B	100 35V	1	[M]
C554	RCA1AM471BT	470 10V	1	[M]
C558	RCEA1E222B-S	2200 25V	1	[M] ⚠
C559	ECBT1H104ZF5	0.1 50V	1	[M]
C560	ECBT1H104ZF5	0.1 50V	1	[M]
C561	ECBT1H104ZF5	0.1 50V	1	[M]
C562	ECBT1H104ZF5	0.1 50V	1	[M]
C563	ECBT1H104ZF5	0.1 50V	1	[M]
C564	ECBT1H104ZF5	0.1 50V	1	[M]
C565	ECBT1H104ZF5	0.1 50V	1	[M]
C566	ECBT1H104ZF5	0.1 50V	1	[M]
C567	ECBT1H104ZF5	0.1 50V	1	[M]
C568	ECBT1H104ZF5	0.1 50V	1	[M]
C569	ECBT1H104ZF5	0.1 50V	1	[M]
C570	ECBT1H104ZF5	0.1 50V	1	[M]

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
C571	RCE1VFW332BJ	3300 35V	1	[M]
C572	RCE1VFW562BJ	5600 35V	1	[M] ⚠
C573	RCE1VFW562BJ	5600 35V	1	[M] ⚠
C574	RCE1VFW332BJ	3300 35V	1	[M] ⚠
C575	ECEA1HKA101B	100 50V	1	[M]
C577	ECEA1HM470B	47 50V	1	[M]
C578	ECBT1H103KB5	0.01 50V	1	[M]
C583	ECQV1H224JZ3	0.22 50V	1	[M]
C584	ECQP1223JZT	0.022 100V	1	[M]
C600	ECBT1H101KB5	100P 50V	1	[M]
C601	ECBT1H101KB5	100P 50V	1	[M]
C602	ECBT1H104ZF5	0.1 50V	1	[M]
C603	ECBT1H101KB5	100P 50V	1	[M]
C604	ECBT1H101KB5	100P 50V	1	[M]
C605	ECBT1E223ZF5	0.022 25V	1	[M]
C606	ECBT1E223ZF5	0.022 25V	1	[M]
C607	ECBT1H104ZF5	0.1 50V	1	[M]
C610	ECBT1H101KB5	100P 50V	1	[M]
C611	ECBT1H101KB5	100P 50V	1	[M]
C616	ECEA1VKA220B	22 35V	1	[M]
C620	ECBT1E103ZF5	0.01 25V	1	[M]
C621	ECEA1EKA4R7B	4.7 25V	1	[M]
C622	ECEA0JKA101B	100 6.3V	1	[M]
C623	ECBT1H102KB5	1000P 50V	1	[M]
C624	RCEA0J102B-S	1000 6.3V	1	[M]
C625	ECBT1H102KB5	1000P 50V	1	[M]
C627	ECBT1E103ZF5	0.01 25V	1	[M]
C628	ECEA1AKA220B	22 10V	1	[M]
C629	ECBT1H331KB5	330P 50V	1	[M]
C630	ECBT1H561KB5	560P 50V	1	[M]
C631	ECBT1H561KB5	560P 50V	1	[M]
C632	ECBT1H561KB5	560P 50V	1	[M]
C633	ECBT1H561KB5	560P 50V	1	[M]
C634	ECBT1H101KB5	100P 50V	1	[M]
C635	ECBT1H561KB5	560P 50V	1	[M]
C636	ECBT1H561KB5	560P 50V	1	[M]
C637	ECBT1H101KB5	100P 50V	1	[M]
C638	ECBT1H561KB5	560P 50V	1	[M]
C639	ECBT1H101KB5	100P 50V	1	[M]
C640	ECBT1H561KB5	560P 50V	1	[M]
C641	ECBT1H561KB5	560P 50V	1	[M]
C642	ECBT1H561KB5	560P 50V	1	[M]
C643	ECBT1H561KB5	560P 50V	1	[M]
C644	ECBT1H561KB5	560P 50V	1	[M]
C645	ECEA1CKA100B	10 16V	1	[M]
C646	ECBT1E103ZF5	0.01 25V	1	[M]
C647	ECEA1HKA0R1B	0.1 50V	1	[M]
C648	ECEA1VKA220B	22 35V	1	[M]
C649	ECBT1E103ZF5	0.01 25V	1	[M]
C650	ECEA1HKA0R1B	0.1 50V	1	[M]
C651	ECEA1HKA0R1B	0.1 50V	1	[M]
C652	ECEA1HKA0R1B	0.1 50V	1	[M]
C653	ECBT1E103ZF5	0.01 25V	1	[M]

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
C654	ECBT1E103ZF5	0.01 25V	1	[M]
C655	ECBT1H150JC5	15P 50V	1	[M]
C656	ECBT1H101KB5	100P 50V	1	[M]
C657	ECBT1H180JC5	18P 50V	1	[M]
C658	ECBT1H101KB5	100P 50V	1	[M]
C659	ECBT1H680J5	68P 50V	1	[M]
C660	ECBT1H680J5	68P 50V	1	[M]
C661	ECEA1HKA3R3B	3.3 50V	1	[M]
C662	ECEA1HKA010B	1 50V	1	[M]
C665	ECBT1H560J5	56P 50V	1	[M]
C666	ECBT1H560J5	56P 50V	1	[M]
C667	ECEA1HKA2R2B	2.2 50V	1	[M]
C668	ECBT1H102KB5	1000P 50V	1	[M]
C669	ECBT1H102KB5	1000P 50V	1	[M]
C670	ECBT1H471KB5	470P 50V	1	[M]
C671	ECBT1H102KB5	1000P 50V	1	[M]
C672	ECBT1H102KB5	1000P 50V	1	[M]
C673	ECBT1H101KB5	100P 50V	1	[M]
C674	ECBT1H101KB5	100P 50V	1	[M]
C675	ECBT1H104ZF5	0.1 50V	1	[M]
C701	ECEA0JKA330I	33 6.3V	1	[M]
C702	ECUZ1E104MBN	0.1 25V	1	[M]
C703	ECEA0JKA101I	100 6.3V	1	[M]
C704	ECUZ1E104MBN	0.1 25V	1	[M]
C706	ECUZ1H272KBN	2700P 50V	1	[M]
C707	ECUZ1E273KBN	0.027 25V	1	[M]
C710	ECUZ1H121KCN	120P 50V	1	[M]
C711	ECUZ1E104ZFN	0.1 25V	1	[M]
C712	ECUZ1E104ZFN	0.1 25V	1	[M]
C713	ECUZ1E104MBN	0.1 25V	1	[M]
C714	ECEA0JKA101I	100 6.3V	1	[M]
C715	ECUZ1H272KBN	2700P 50V	1	[M]
C716	ECUZ1H821KBN	820P 50V	1	[M]
C717	ECUZ1E104ZFN	0.1 25V	1	[M]
C718	ECUZ1C224KBN	0.22 16V	1	[M]
C721	ECUZ1H100DCN	10P 50V	1	[M]
C722	ECUZ1H100DCN	10P 50V	1	[M]
C723	ECEA1AKA221I	220 10V	1	[M]
C724	ECUZ1E104MBN	0.1 25V	1	[M]
C725	ECUZ1H102KBN	1000P 50V	1	[M]
C726	ECUZ1H102KBN	1000P 50V	1	[M]
C727	ECA1HAK010XI	1 50V	1	[M]
C728	ECA1HAK010XI	1 50V	1	[M]
C730	ECUZ1E104ZFN	0.1 25V	1	[M]
C731	ECEA0JKA221I	220 6.3V	1	[M]
C732	ECEA0JKA221I	220 6.3V	1	[M]
C733	ECUZ1E104MBN	0.1 25V	1	[M]
C734	ECEA1AKA221I	220 10V	1	[M]
C735	ECUZ1E104ZFN	0.1 25V	1	[M]
C736	ECUZ1E104ZFN	0.1 25V	1	[M]
C737	ECUZ1E104ZFN	0.1 25V	1	[M]
C738	ECUZ1H103KBN	0.01 50V	1	[M]
C739	ECUZ1H152KBN	1500P 50V	1	[M]
C742	ECUZ1E273KBN	0.027 25V	1	[M]

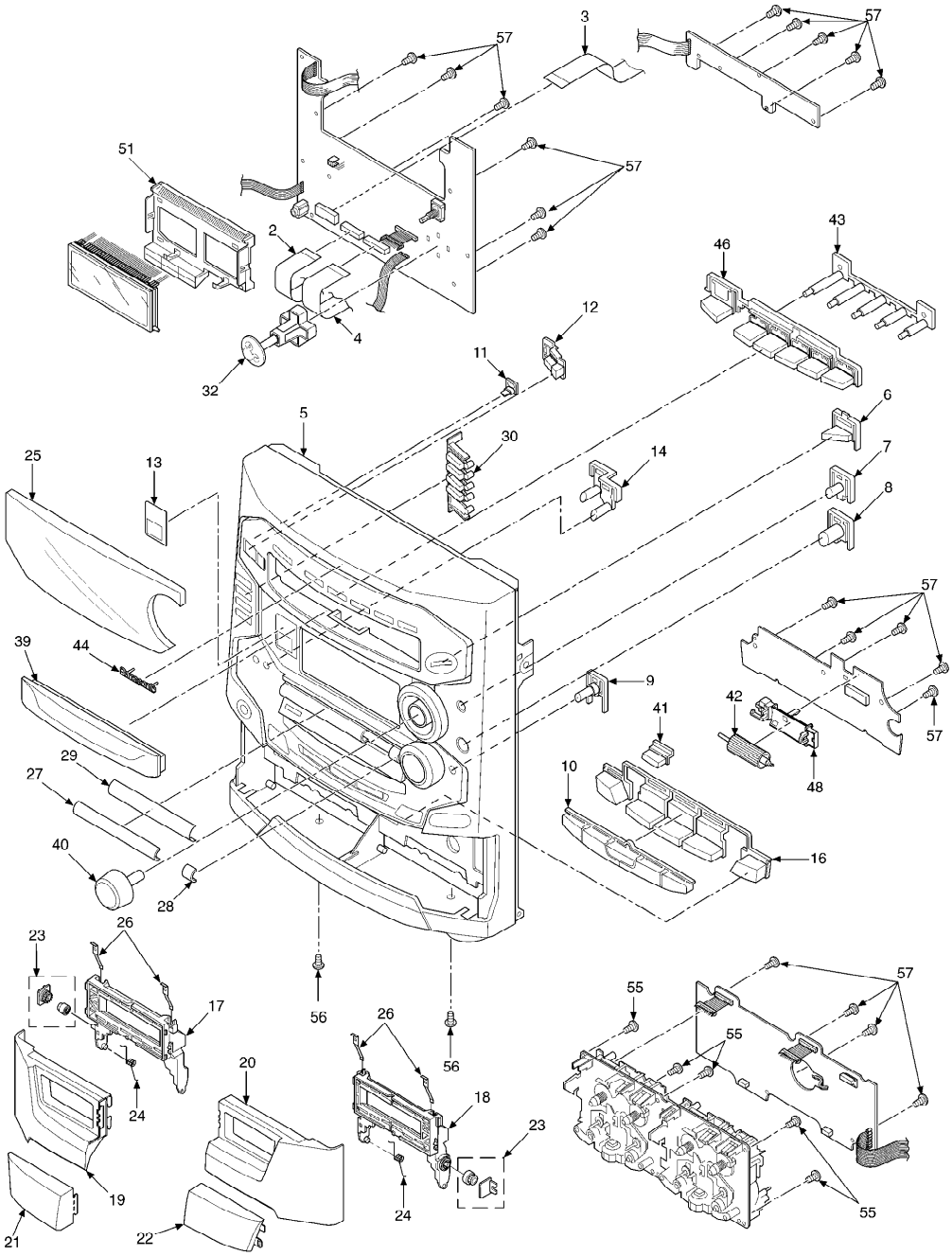
Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
C743	ECUZ1E104ZFN	0.1 25V	1	[M]
C744	ECUZ1E822KBN	8200P 25V	1	[M]
C745	ECUZ1H102KBN	1000P 50V	1	[M]
C747	ECUZ1H181KCN	180P 50V	1	[M]
C749	ECUZ1H222KBN	2200P 50V	1	[M]
C750	ECUZ1E104MBN	0.1 25V	1	[M]
C751	ECUZ1E104MBN	0.1 25V	1	[M]
C752	ECUZ1H102KBN	1000P 50V	1	[M]
C753	ECUZ1H471KBM	470P 50V	1	[M]
C754	ECUZ1H471KBN	470P 50V	1	[M]
C801	ECEA1HKA2R2B	2.2 50V	1	[M]
C802	ECEA1HKA2R2B	2.2 50V	1	[M]
C803	ECEA1CKA470B	47 16V	1	[M]
C804	ECEA1HKAR47B	0.47 50V	1	[M]
C805	ECFR1C223KR	0.022 16V	1	[M]
C806	ECFR1C473KR	0.047 16V	1	[M]
C807	ECUZ1H681KBN	680P 50V	1	[M]
C808	ECEA1CKA470B	47 16V	1	[M]
C809	ECEA1CM221B	220 16V	1	[M]
C810	ECEA1HKA100B	10 50V	1	[M]
C811	ECFR1C823MR	0.082 16V	1	[M]
C812	ECUZ1H332KBN	3300P 50V	1	[M]
C813	ECFR1C823MR	0.082 16V	1	[M]
C814	ECEA1HKAR47B	0.47 50V	1	[M]
C815	ECEA1HKAR33B	0.33 50V	1	[M]
C816	ECEA1CKA100B	10 16V	1	[M]
C817	ECEA1HKA220B	22 50V	1	[M]
C818	ECEA1CM221B	220 16V	1	[M]
C819	ECUV1H330JCN	33P 50V	1	[M]
C820	ECEA1HKA2R2B	2.2 50V	1	[M]
C821	ECEA1CKA470B	47 16V	1	[M]
C822	ECUZ1H101KBN	100P 50V	1	[M]
C823	ECEA1HKA100B	10 50V	1	[M]
C824	ECEA1CM221B	220 16V	1	[M]
C825	ECFR1C183MR	0.018 16V	1	[M]
C828	ECEA1HKA010B	1 50V	1	[M]
C829	ECEA1CM221B	220 16V	1	[M]
C830	ECEA1CKA100B	10 16V	1	[M]
C831	ECEA1CKA100B	10 16V	1	[M]
C832	ECEA1CKA100B	10 16V	1	[M]
C833	ECEA1CKA100B	10 16V	1	[M]
C834	ECFR1C104KR	0.1 16V	1	[M]
C835	ECFR1C104KR	0.1 16V	1	[M]
C836	ECEA1HKAR47B	0.47 50V	1	[M]
C837	ECUZ1E104ZFN	0.1 25V	1	[M]
C838	ECEA1HKA010B	1 50V	1	[M]
C840	ECEA1CKA100B	10 16V	1	[M]
C841	ECEA1CKA100B	10 16V	1	[M]
C842	ECEA1HKA4R7B	4.7 50V	1	[M]
C843	ECEA1HKAR47B	0.47 50V	1	[M]
C844	ECEA1HKA4R7B	4.7 50V	1	[M]
C845	ECEA1HKAR15B	0.15 50V	1	[M]
C846	ECEA1HKA3R3B	3.3 50V	1	[M]
C847	ECEA1HKAR15B	0.15 50V	1	[M]

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
C848	ECEA1HKAR15B	0.15 50V	1	[M]
C851	ECEA1CM221B	220 16V	1	[M]
C861	ECEA1HKA2R2B	2.2 50V	1	[M]
C862	ECEA1HKA2R2B	2.2 50V	1	[M]
C863	ECEA1HKA0R1B	0.1 50V	1	[M]
C864	ECKR1H473ZF5	0.047 50V	1	[M]
C865	ECEA1CKA100B	10 16V	1	[M]
C866	ECEA1CKA100B	10 16V	1	[M]
C867	ECEA1HKA3R3B	3.3 50V	1	[M]
C868	ECEA1HKAR15B	0.15 50V	1	[M]
C869	ECEA1CKA330B	33 16V	1	[M]
C870	ECEA1HKA4R7B	4.7 50V	1	[M]
C873	ECEA0JKA101B	100 6.3V	1	[M]
C874	ECEA0JKA101B	100 6.3V	1	[M]
C875	ECEA1HKAR47B	0.47 50V	1	[M]
C882	ECEA1CM221B	220 16V	1	[M]
C883	ECEA1HKA4R7B	4.7 50V	1	[M]
C887	ECUZ1E104KBN	0.1 25V	1	[M]
C888	ECUV1H330JCN	33P 50V	1	[M]
C889	ECUV1H330JCN	33P 50V	1	[M]
C896	ECEA1HKAR47B	0.47 50V	1	[M]
C897	ECFR1C104KR	0.1 16V	1	[M]
C898	ECFR1C104KR	0.1 16V	1	[M]
C899	ECKR2H103ZF5	0.01 500V	1	[M]
C900	ECEA1CKA330B	33 16V	1	[M]
C978	ECKR1H103ZF5	0.01 50V	1	[M]
C980	ECKR1H103ZF5	0.01 50V	1	[M]
C981	ECEA1EKA470B	47 25V	1	[M]
C984	RCEA1C102B-S	1000P 16V	1	[M] ⚠
C1101	ECUZ1H102KBN	1000P 50V	1	[M]
C1102	ECUZ1H102KBN	1000P 50V	1	[M]
C1103	ECUZ1H681KBN	680P 50V	1	[M]
C1104	ECFR1C223KR	0.022 16V	1	[M]
C1105	ECUZ1H122KBN	1200P 50V	1	[M]
C1106	ECUZ1H122KBN	1200P 50V	1	[M]
C1108	ECEA1CKA330B	33 16V	1	[M]
C1109	ECEA1CKA101B	100 16V	1	[M]
C1111	ECUZ1H821KBN	820P 50V	1	[M]
C1112	ECUZ1H821KBN	820P 50V	1	[M]
C1113	ECEA0JKA221B	220 6.3V	1	[M]
C1114	ECEA0JKA221B	220 6.3V	1	[M]
C1115	ECFR1C333JR	0.033 16V	1	[M]
C1116	ECFR1C333JR	0.033 16V	1	[M]
C1117	ECEA1HKM010B	1 50V	1	[M]
C1118	ECEA1HKM010B	1 50V	1	[M]
C1119	ECEA1HKA4R7B	4.7 50V	1	[M]
C1120	ECEA1HKA4R7B	4.7 50V	1	[M]
C1121	ECEA1HKA010B	1 50V	1	[M]
C1122	ECEA1HKA010B	1 50V	1	[M]
C1123	ECUZ1H182KBN	1800P 50V	1	[M]
C1124	ECUZ1H182KBN	1800P 50V	1	[M]
C1125	ECFR1C473MR	0.047 16V	1	[M]
C1126	ECFR1C473MR	0.047 16V	1	[M]
C1127	ECUZ1H103KBN	0.01 50V	1	[M]

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
C1128	ECUZ1H103KBN	0.01 50V	1	[M]
C1129	ECUZ1H821KBN	820P 50V	1	[M]
C1130	ECUZ1H821KBN	820P 50V	1	[M]
C1131	ECUZ1H821KBN	820P 50V	1	[M]
C1132	ECUZ1H821KBN	820P 50V	1	[M]
C1133	ECEA1HKA4R7B	4.7 50V	1	[M]
C1134	ECEA1HKA4R7B	4.7 50V	1	[M]
C1135	ECUZ1H102KBN	1000P 50V	1	[M]
C1136	ECUZ1H102KBN	1000P 50V	1	[M]
C1139	ECEA1HKA2R2B	2.2 50V	1	[M]
C1140	ECEA1CKA100B	10 16V	1	[M]
C1141	ECEA1HKA0R1B	0.1 50V	1	[M]
C1142	ECFR1C223KR	0.022 16V	1	[M]
C1143	ECEA1HKA4R7B	4.7 50V	1	[M]
C1144	ECEA1HKA4R7B	4.7 50V	1	[M]
C1145	ECEA1CKA100B	10 16V	1	[M]
C1146	ECEA1CKA100B	10 16V	1	[M]
C1147	ECUZ1H152KBN	1500P 50V	1	[M]
C1148	ECUZ1H152KBN	1500P 50V	1	[M]
C1150	ECEA1AKA470B	47 10V	1	[M]
C1151	ECEA1CKA100B	10 16V	1	[M]
C1152	ECEA1CKA100B	10 16V	1	[M]
C1153	ECUZ1H102KBN	1000P 50V	1	[M]
C1154	ECUZ1H102KBN	1000P 50V	1	[M]
C1162	ECEA1CKA101B	100 16V	1	[M]
C1165	ECEA1CKA100B	10 16V	1	[M]
C1166	ECEA1CKA100B	10 16V	1	[M]
C1173	ECUZ1H103KBN	0.01 50V	1	[M]
C1174	ECEA1HKA4R7B	4.7 50V	1	[M]
C1175	ECEA1VU221B	220 35V	1	[M]
C1176	ECQV1H473JZ3	0.047 50V	1	[M]
C1177	ECUZ1H102KBN	1000P 50V	1	[M]
C1178	ECUZ1H102KBN	1000P 50V	1	[M]
C1179	ECUZ1H103KBN	0.01 50V	1	[M]
C1180	ECUZ1H103KBN	0.01 50V	1	[M]
C1181	ECUZ1H103KBN	0.01 50V	1	[M]
C1182	ECEA1HKA4R7B	4.7 50V	1	[M]
C1183	ECQV1H474JZ3	0.47 50V	1	[M]
C1184	ECQP1152JZT	1500P 100V	1	[M]
C1185	ECQP2A472JZT	4700P 100V	1	[M]
C1186	ECEA1AKA470B	47 10V	1	[M]
C1187	ECUZ1H101KBN	100P 50V	1	[M]
C1188	ECUZ1H101KBN	100P 50V	1	[M]
C1193	ECUZ1H102KBN	1000P 50V	1	[M]
C1194	ECUZ1H102KBN	1000P 50V	1	[M]
C1201	ECEA1CKA101B	100 16V	1	[M]
C1202	ECUZ1E104ZFN	0.1 25V	1	[M]
		CHIP JUMPER		
RJ701	ERJ6GEY0R00A	0 1/10W	1	[M]
RJ702	ERJ8GEY0R00A	0 1/8W	1	[M]
RJ704	ERJ8GEY0R00A	0 1/8W	1	[M]
RJ707	ERJ8GEY0R00A	0 1/8W	1	[M]

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
RJ708	ERJ8GEY0R00A	0 1/8W	1	[M]
RJ709	ERJ8GEY0R00A	0 1/8W	1	[M]
RJ710	ERJ8GEY0R00A	0 1/8W	1	[M]
RJ712	ERJ8GEY0R00A	0 1/8W	1	[M]
RJ715	ERJ6GEY0R00A	0 1/10W	1	[M]
RJ716	ERJ6GEY0R00A	0 1/10W	1	[M]
RJ721	ERJ6GEY0R00A	0 1/10W	1	[M]
RJ722	ERJ6GEY0R00A	0 1/10W	1	[M]
RJ724	ERJ6GEY0R00A	0 1/10W	1	[M]
RJ727	ERJ6GEY0R00A	0 1/10W	1	[M]
RJ728	ERJ6GEY0R00A	0 1/10W	1	[M]
RJ731	ERJ6GEY0R00A	0 1/10W	1	[M]
RJ732	ERJ6GEY0R00A	0 1/10W	1	[M]
RJ734	ERJ6GEY0R00A	0 1/10W	1	[M]
RJ750	ERJ6GEY0R00A	0 1/10W	1	[M]
		TEST JUMPER		
TJ701	EYF8CU	TEST JUMEPR	1	[M]

22. Cabinet Parts Location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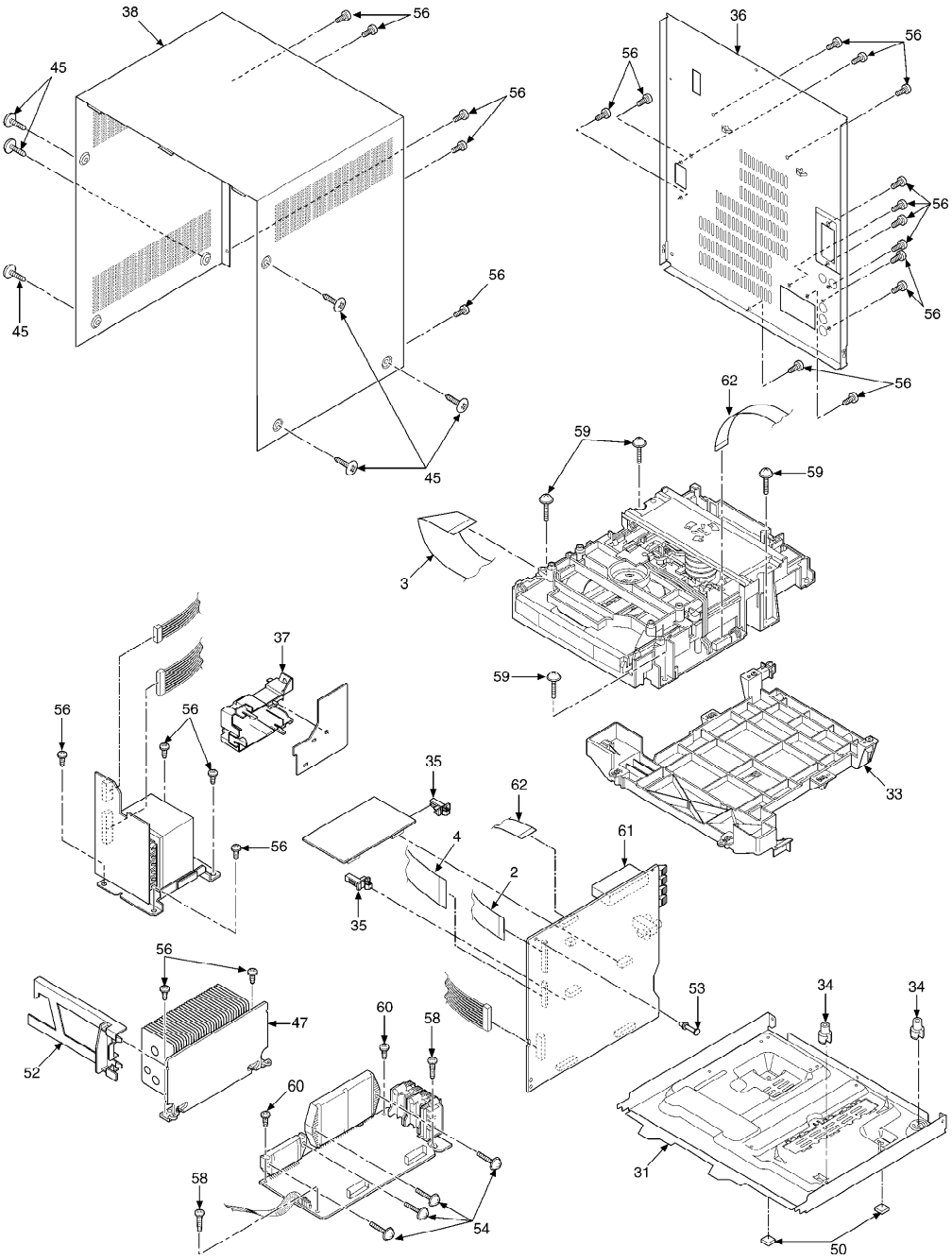
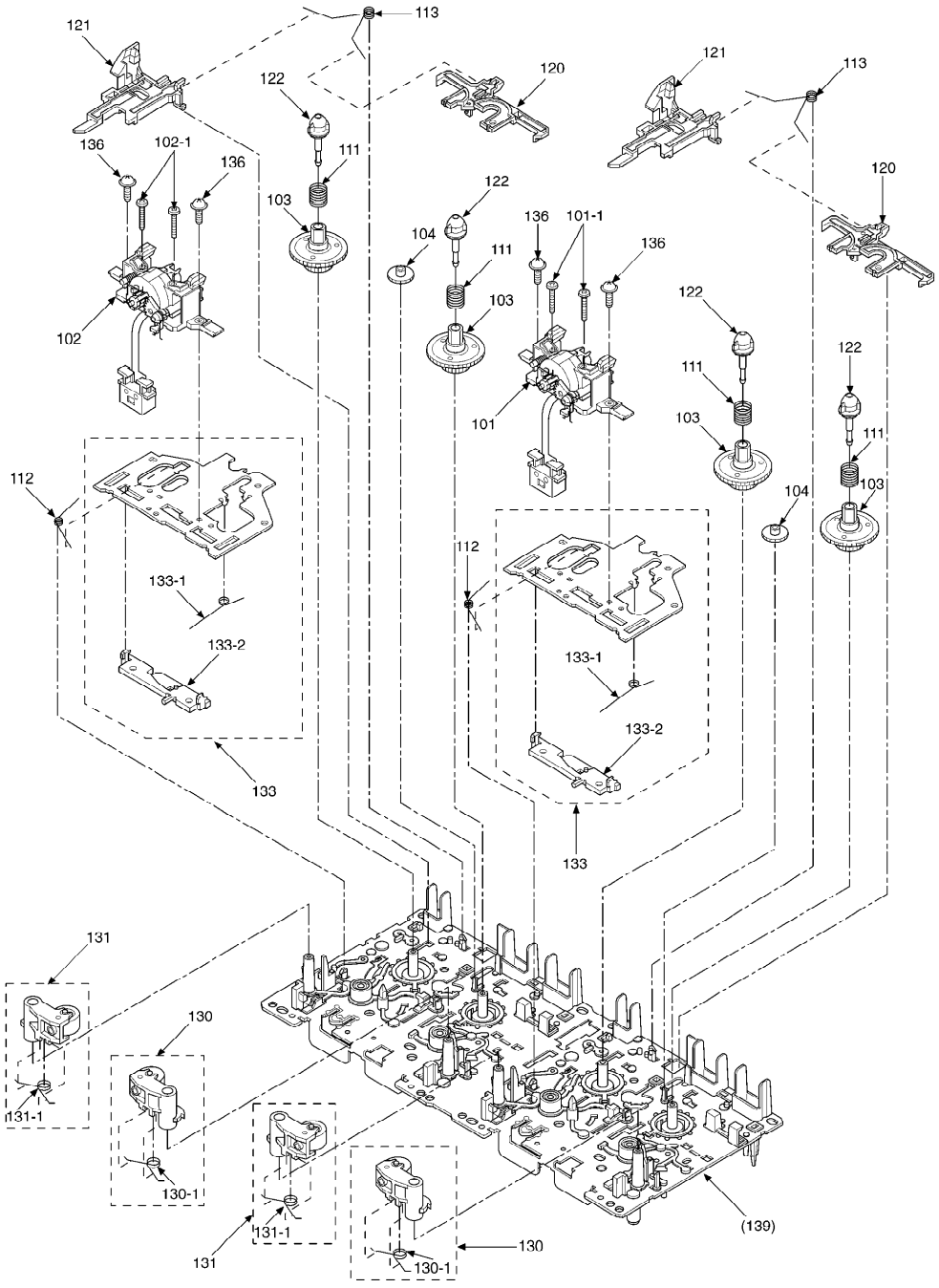


23. Mechanism Parts Location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133-2
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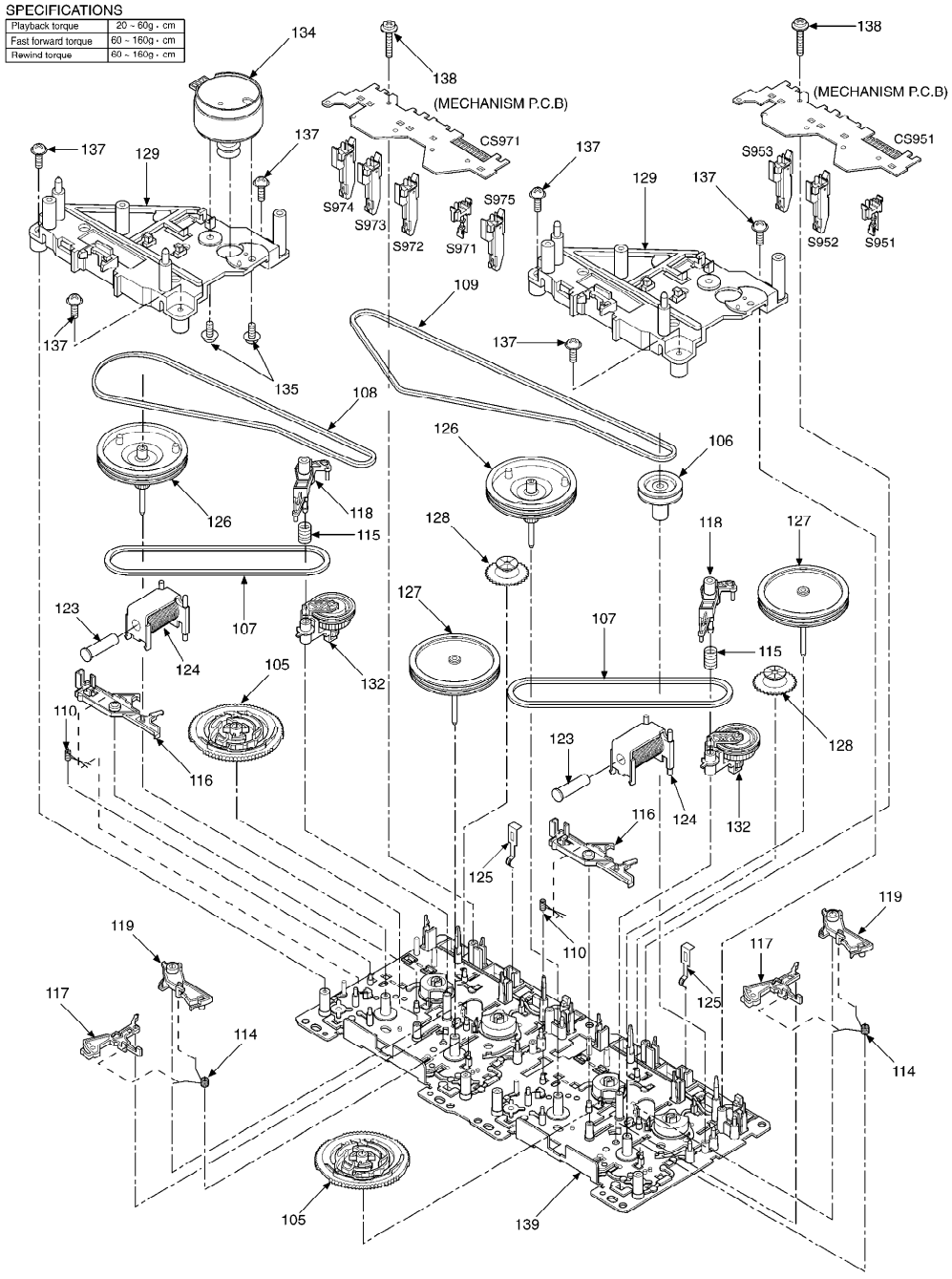
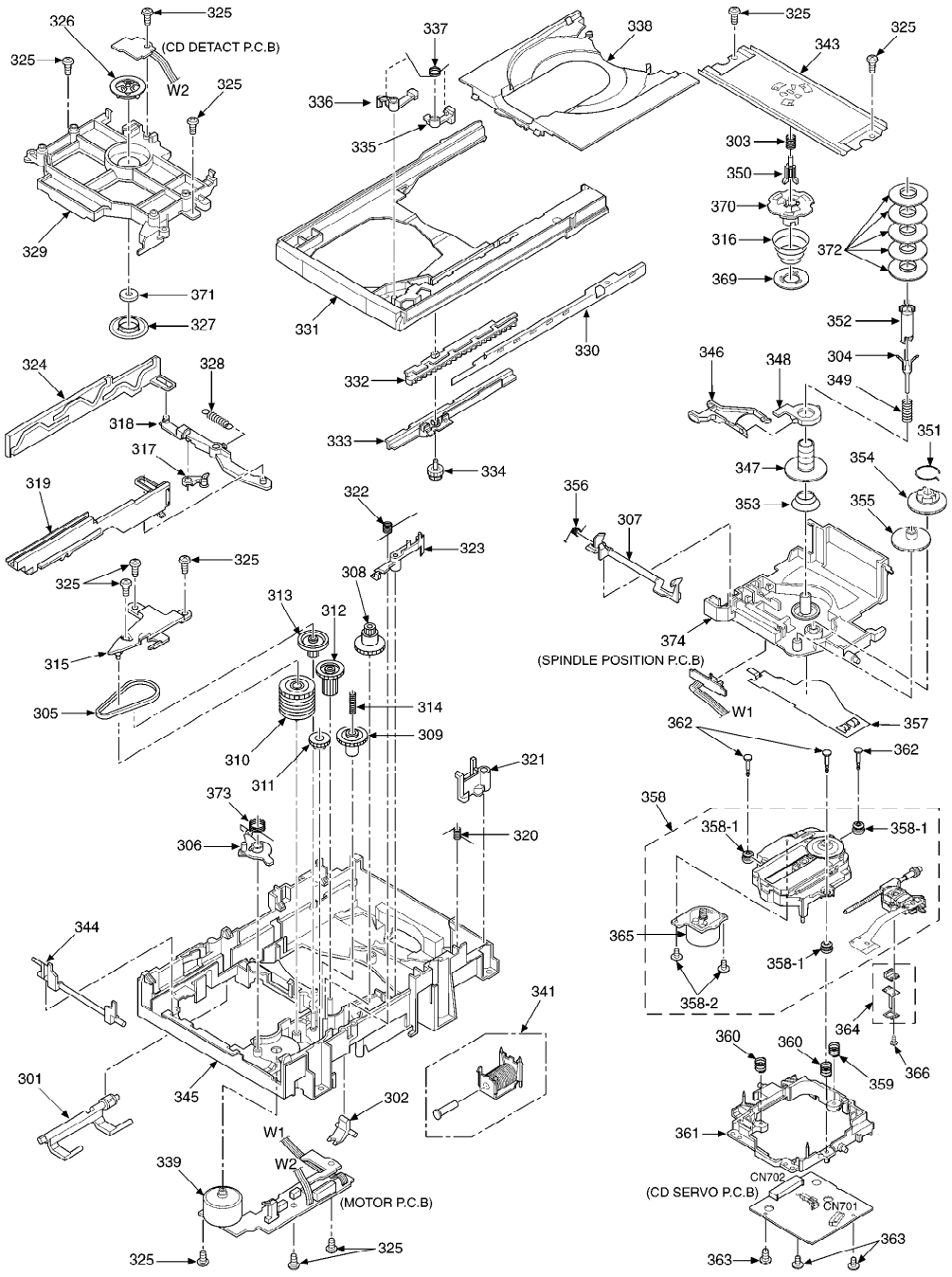
SPECIFICATIONS

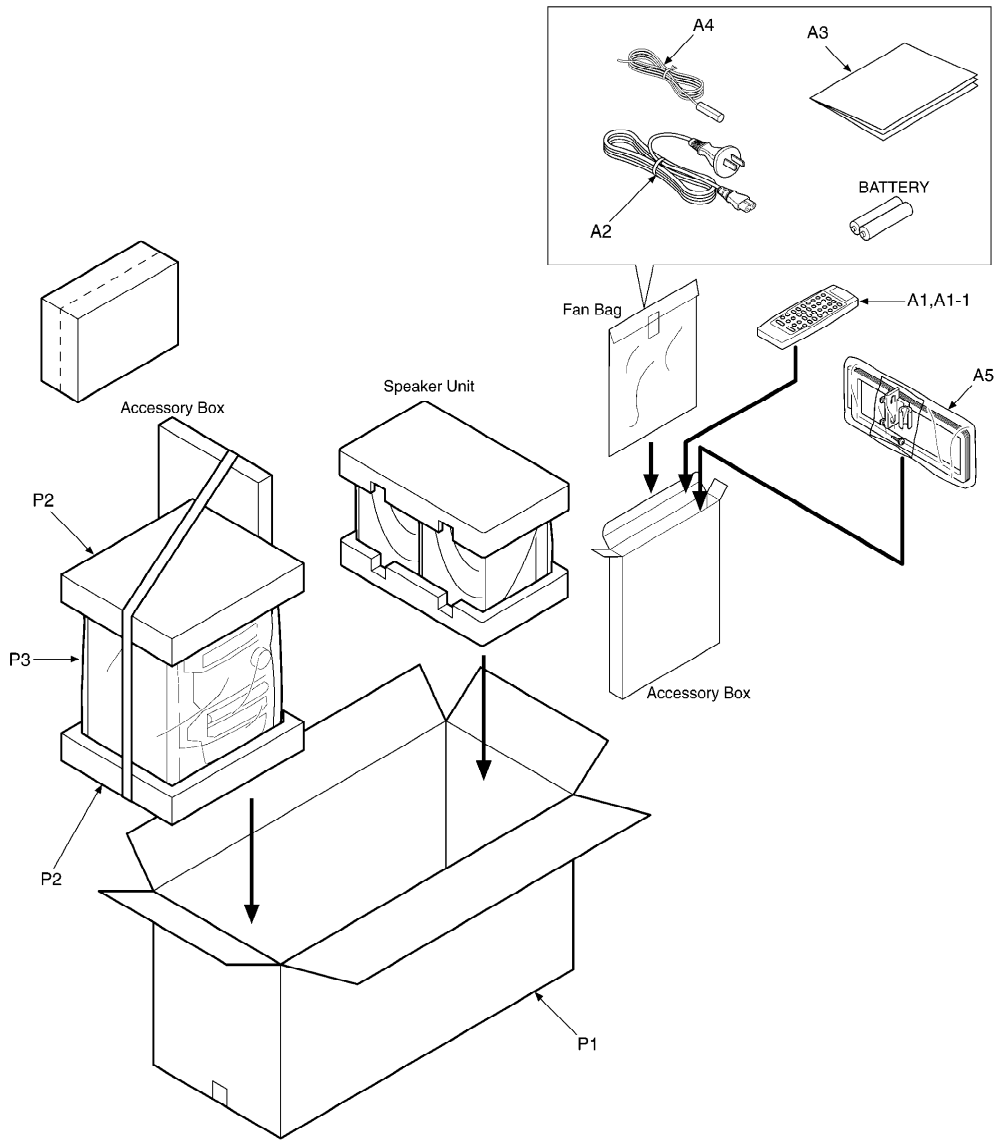
Playback torque	20 ~ 60g · cm
Fast forward torque	60 ~ 160g · cm
Rewind torque	60 ~ 160g · cm



24. CD Mechanism Parts Location



25. Packaging

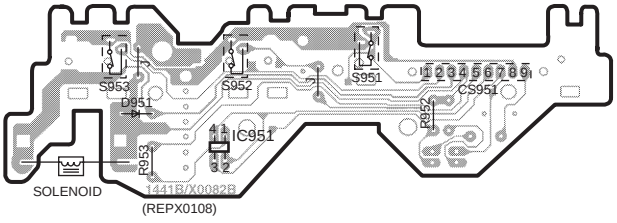


Printed in Japan (M000500000MT)

■ ELECTRICAL PARTS LOCATION

Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.
E MECHANISM P.C.B. (DECK 1)															
IC951 D951	3B 3A	S951	3B	S952	3B	S953	3A	CS951	3C	R952	3C	R953	3A		
D MECHANISM P.C.B. (DECK 2)															
IC971 D971	3E 3D	Z971 S971	3E 3E	S972 S973	3E 3D	S974	3D	S975	3F	CS971	3F	R972	3F	R973	3D

E MECHANISM P.C.B. (DECK1)

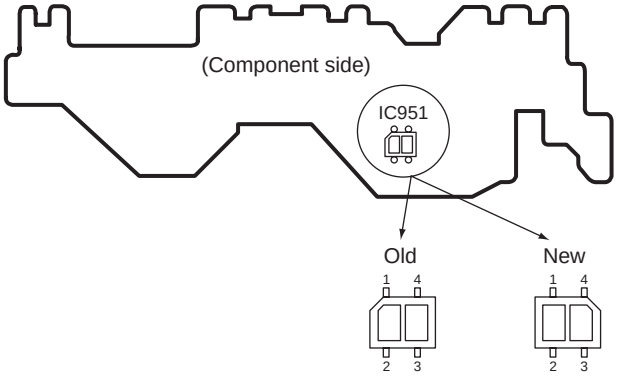


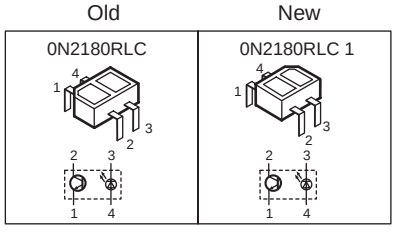
(REPX0108)

Note for IC951 replacement

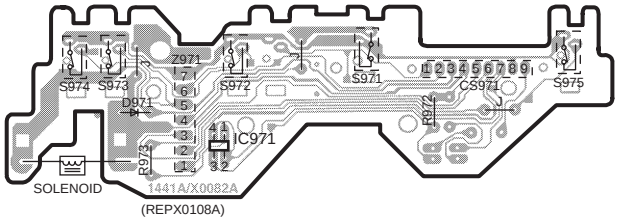
- Two different types (old or new) parts are mounted on P.C.B. as for IC951.
- When servicing, care to replace the parts due to those shape.
- Replacement procedures

	Parts No.	Direction	Remarks
Old	0N2180RLC	Mount the parts on given position. (Printed pattern on P.C.B.)	Refer to the figure below.
New	0N2180RLC1 ≈	Mount the parts so the cut corner is located upper right.	





D MECHANISM P.C.B. (DECK2)

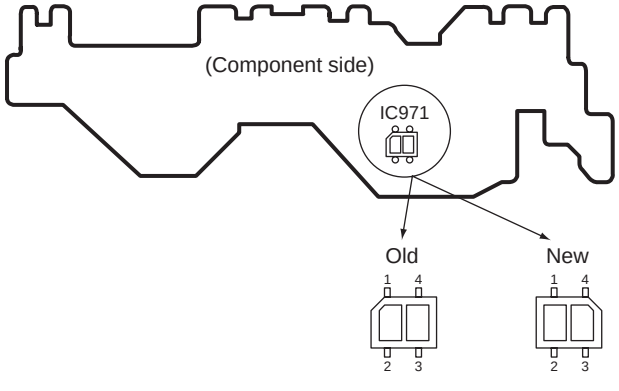


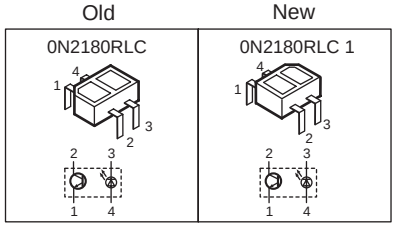
(REPX0108A)

Note for IC971 replacement

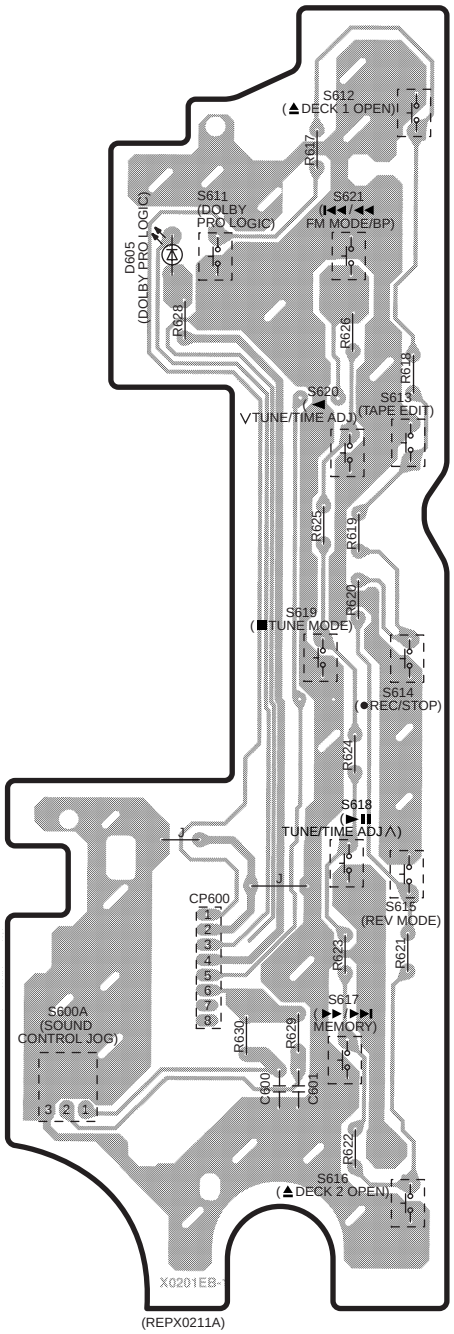
- Two different types (old or new) parts are mounted on P.C.B. as for IC971.
- When servicing, care to replace the parts due to those shape.
- Replacement procedures

	Parts No.	Direction	Remarks
Old	0N2180RLC	Mount the parts on given position. (Printed pattern on P.C.B.)	Refer to the figure below.
New	0N2180RLC1 ≈	Mount the parts so the cut corner is located upper right.	



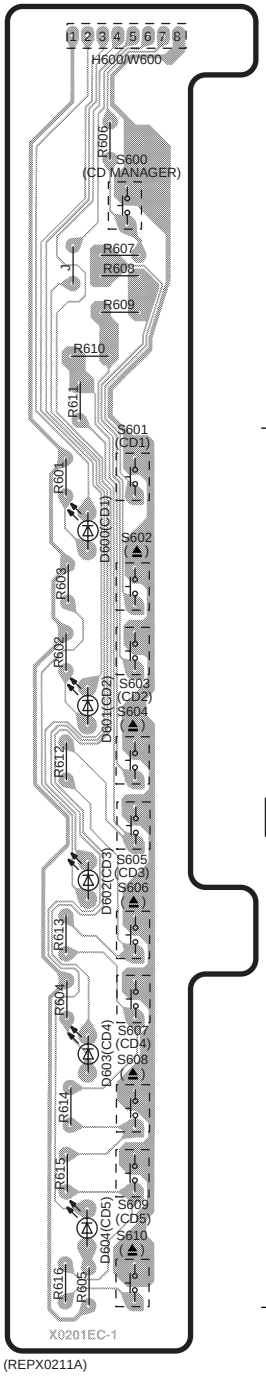


H OPERATION (2) P.C.B.



(REPX0211A)

G OPERATION (1) P.C.B.

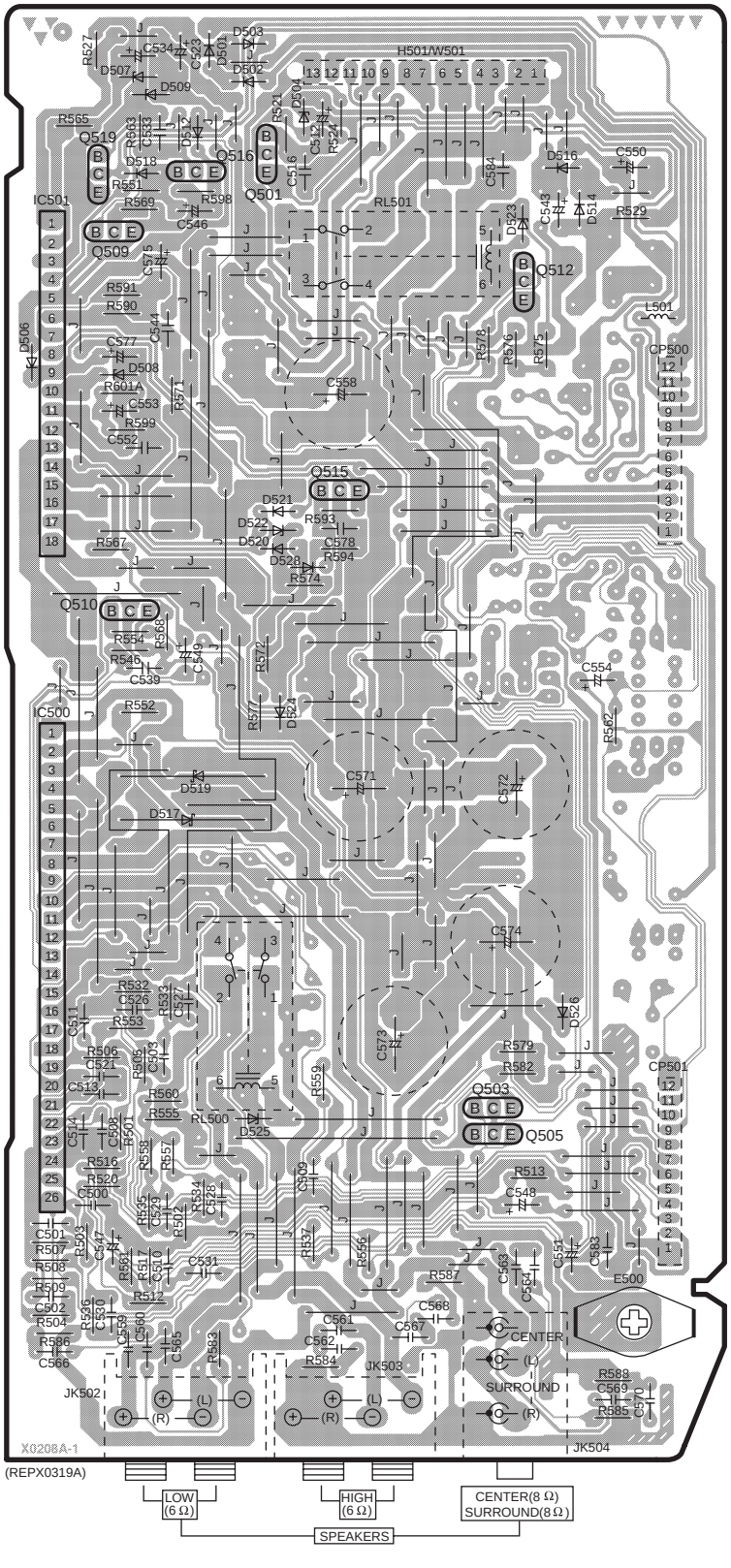


(REPX0211A)

■ELECTRICAL PARTS LOCATION

Ref. No.	Lo. No.	Ref. No.	Lo. No.
H OPERATION (2) P.C.B.			
D605	2B	R618	3C
S611	2B	R619	4B
S612	2C	R620	4B
S613	3C	R621	5C
S614	4C	R622	6B
S615	5C	R623	5B
S616	7C	R624	5B
S617	6B	R625	4B
S618	5B	R626	3B
S619	4B	R628	3B
S620	3B	R629	6B
S621	2B	R630	6B
S600A	6A	C600	6B
CP600	6B	C601	6B
R617	2B		
G OPERATION (1) P.C.B.			
D600	4D	R601	3D
D601	4D	R602	4D
D602	5D	R603	4D
D603	6D	R604	6D
D604	7D	R605	7D
S600	2D	R606	2D
S601	3D	R607	2D
S602	4D	R608	2D
S603	4D	R609	3D
S604	5D	R610	3D
S605	5D	R611	3D
S606	5D	R612	5D
S607	6D	R613	5D
S608	6D	R614	6D
S609	6D	R615	6D
S610	7D	R616	7D
H600/W600	1D		

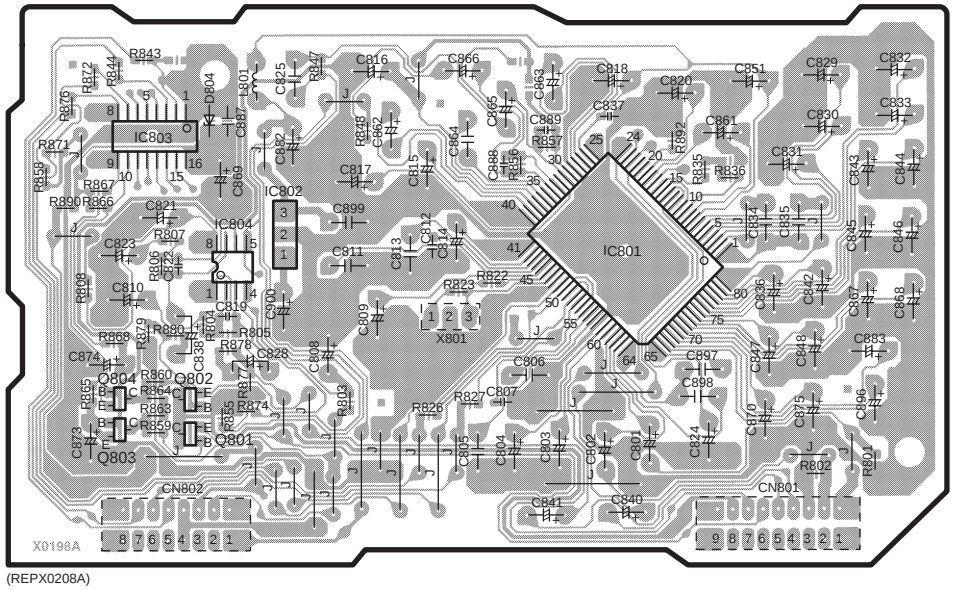
M POWER AMP P.C.B.



■ELECTRICAL PARTS LOCATION

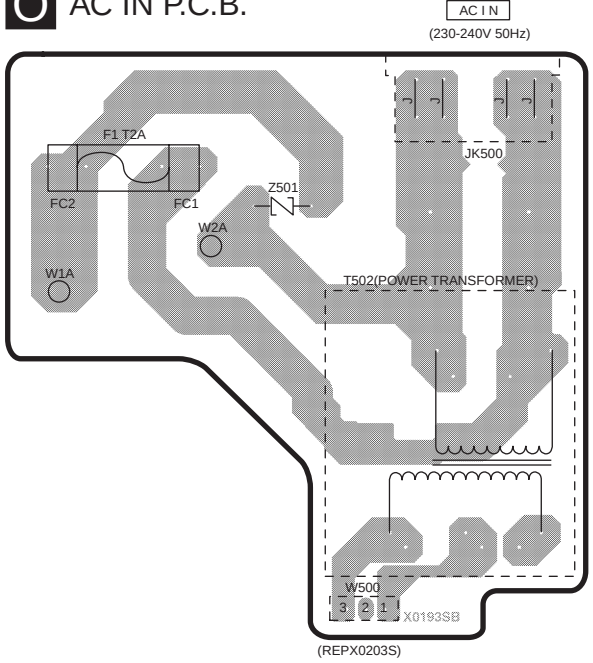
Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.
M POWER AMP P.C.B.					
IC500	5A	R517	7B	C503	6B
IC501	3A	R520	7A	C508	6A
Q501	2B	R521	2B	C509	7B
Q503	6C	R524	2B	C510	7B
Q505	6C	R527	1A	C511	6A
Q509	2A	R529	2D	C512	2B
Q510	4A	R532	6A	C513	6A
Q512	2C	R533	6B	C514	6A
Q515	3B	R534	7B	C516	2B
Q516	2B	R535	7B	C521	6A
Q519	2A	R536	7A	C523	1B
D501	1B	R537	7B	C526	6A
D502	2B	R546	4A	C527	6B
D503	1B	R551	2A	C528	7B
D504	2B	R552	4A	C529	7B
D506	3A	R553	6A	C530	7A
D507	2A	R554	4A	C531	7B
D508	3A	R555	6B	C533	2B
D509	2B	R556	7C	C534	1A
D512	2B	R557	7B	C539	4A
D514	2D	R558	7B	C543	2C
D516	2C	R559	6B	C544	3B
D517	5B	R560	6B	C546	2B
D518	2A	R561	7A	C547	7A
D519	5B	R562	5D	C548	7C
D520	4B	R563	2A	C549	4B
D521	4B	R565	2A	C550	2D
D522	4B	R567	4A	C551	7C
D523	2C	R568	4B	C552	3A
D524	4B	R569	2A	C553	3A
D525	6B	R571	3B	C554	4D
D526	6C	R572	4B	C558	3B
D528	4B	R574	4B	C559	7A
L501	3D	R575	3C	C560	7A
RL500	6B	R576	3C	C561	7B
RL501	2C	R577	4B	C562	7B
CP500	3D	R578	3C	C563	7C
CP501	7D	R579	6C	C564	7C
JK502	8B	R582	6C	C565	7B
JK503	8B	R583	7B	C566	7A
JK504	8C	R584	8B	C567	7C
E500	7D	R585	8D	C568	7C
H501/W501	1C	R586	7A	C569	8D
R501	6A	R587	7C	C570	8D
R502	7B	R588	8D	C571	5B
R503	7A	R590	3A	C572	5C
R504	7A	R591	3A	C573	6C
R505	6A	R593	4B	C574	6C
R506	6A	R594	4B	C575	2B
R507	7A	R598	2B	C577	3A
R508	7A	R599	3A	C578	4B
R509	7A	R601A	3A	C583	7D
R512	7A	C500	7A	C584	2C
R513	7C	C501	7A		
R516	7A	C502	7A		

F DPL P.C.B.



(REPX0208A)

O AC IN P.C.B.

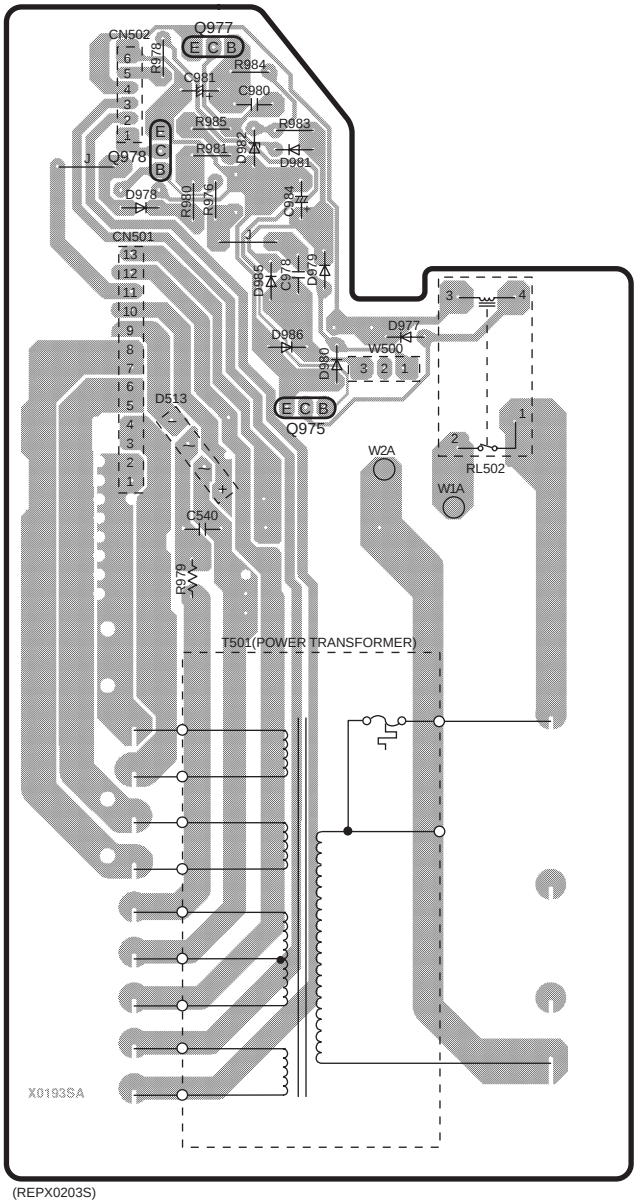


(REPX0203S)

■ELECTRICAL PARTS LOCATION

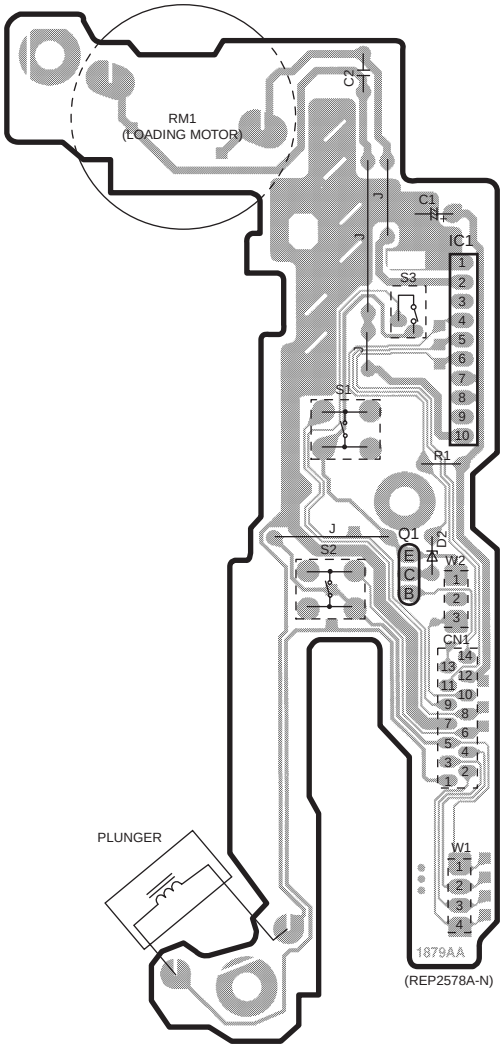
Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.
F DPL P.C.B.							
IC801	2D	R855	3B	C810	3B	C844	2E
IC802	2B	R856	2C	C811	2C	C845	2E
IC803	2B	R857	2C	C812	2C	C846	2E
IC804	2B	R858	2A	C813	2C	C847	3D
Q801	3B	R859	3B	C814	2C	C848	3E
Q802	3B	R860	3B	C815	2C	C851	2D
Q803	3B	R863	3B	C816	1C	C861	2D
Q804	3B	R864	3B	C817	2C	C862	2C
D804	2B	R865	3A	C818	2D	C863	2C
L801	2B	R866	2A	C819	3B	C864	2C
X801	3C	R867	2A	C820	2D	C865	2C
CN801	4D	R868	3A	C821	2B	C866	1C
CN802	4B	R871	2A	C822	2B	C867	3E
R801	3E	R872	2A	C823	2B	C868	3E
R802	3E	R874	3B	C824	3D	C869	2B
R803	3C	R876	2A	C825	2B	C870	3D
R804	3B	R877	3B	C828	3B	C873	3A
R805	3B	R878	3B	C829	1E	C874	3A
R806	2B	R879	3B	C830	2E	C875	3E
R807	2B	R880	3B	C831	2E	C882	2B
R808	2A	R890	2A	C832	1E	C883	3E
R822	2C	R892	2D	C833	2E	C887	2B
R823	2C	C801	3D	C834	2D	C888	2C
R826	3C	C802	3D	C835	2E	C889	2C
R827	3C	C803	3C	C836	2D	C896	3E
R835	2D	C804	3C	C837	2D	C897	3D
R836	2D	C805	3C	C838	3B	C898	3D
R843	1B	C806	3C	C840	3D	C899	2C
R844	1B	C807	3C	C841	3C	C900	3B
R847	1B	C808	3B	C842	2E		
R848	2C	C809	3C	C843	2E		
O AC IN P.C.B.							
T502	6C	FC2	5A	W1A	6A		
Z501	5B	F1	5B	W2A	5B		
FC1	5B	JK500	5C	W500	7C		

N POWER TRANSFORMER P.C.B.



(REPX0203S)

J LOADING MOTOR P.C.B.



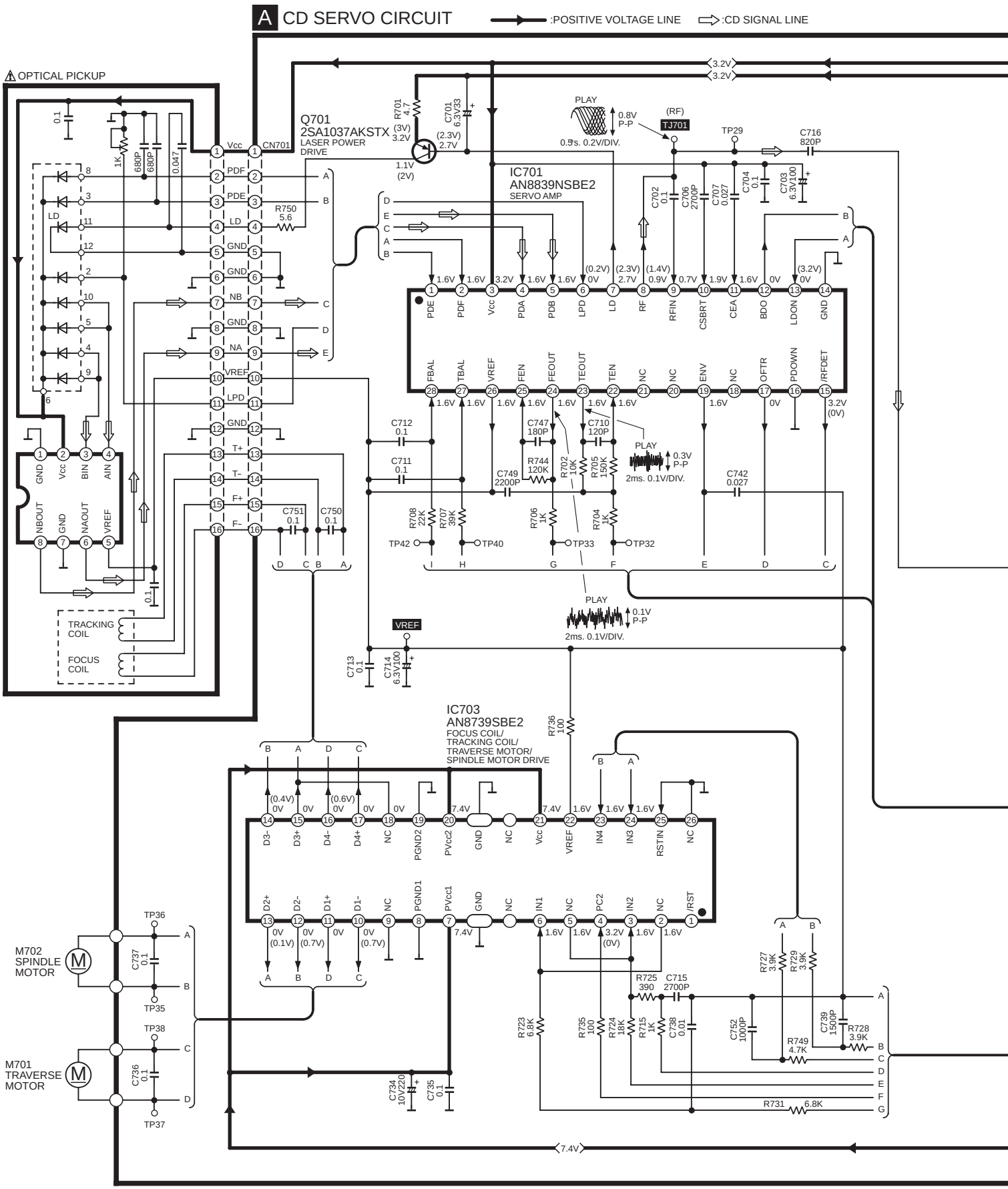
(REP2578A-N)

■ ELECTRICAL PARTS LOCATION

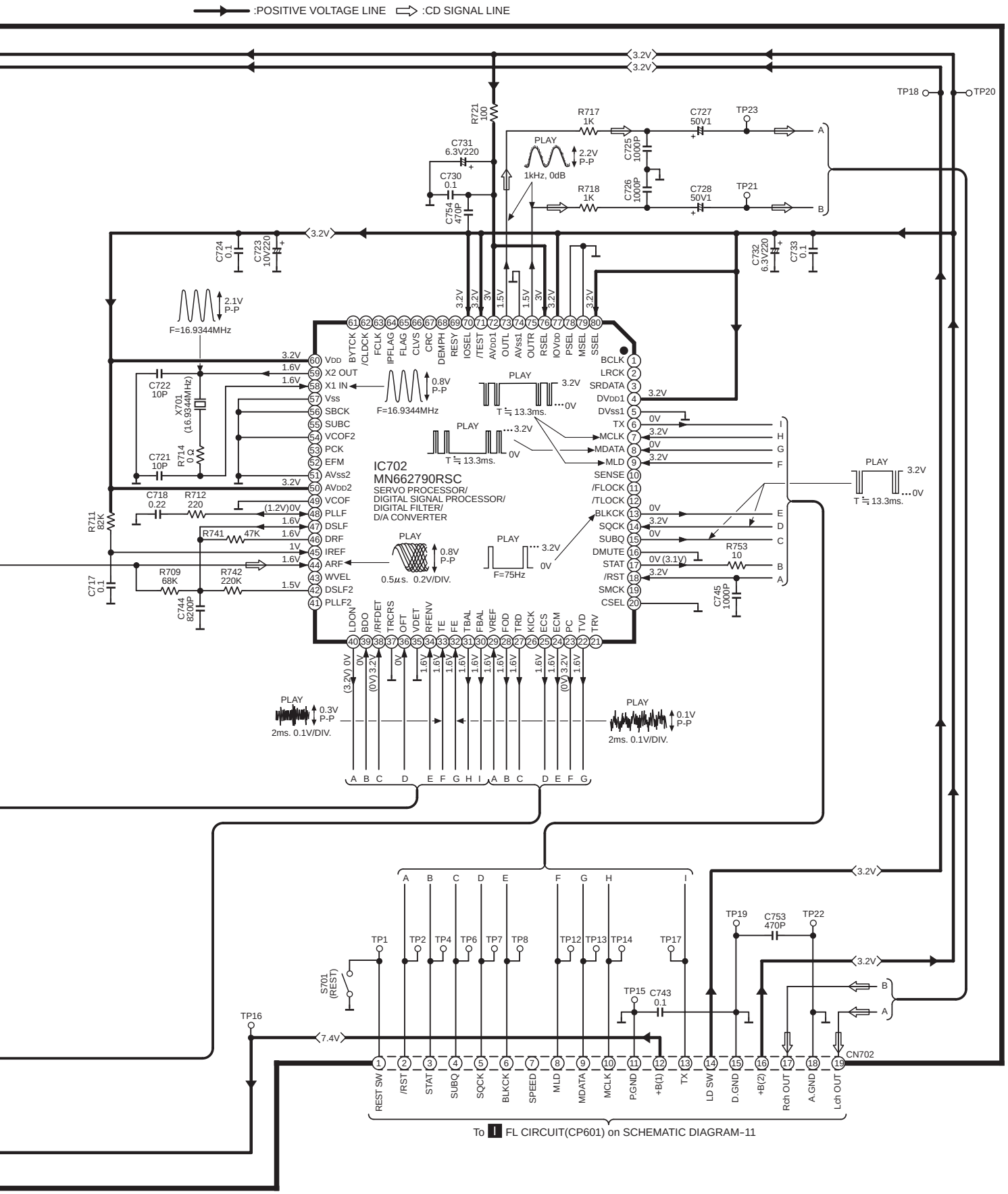
Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.
N POWER TRANSFORMER P.C.B.					
Q975	3B	D986	3B	R980	2B
Q977	1B	T501	5C	R981	2B
Q978	2B	RL502	3C	R983	2B
D513	3B	CN501	3B	R984	2B
D977	3C	CN502	2B	R985	2B
D978	2B	W1A	3C	R987	4B
D979	2B	W2A	3C	C540	4B
D980	3C	W500	3C	C978	2B
D981	2B	R976	2B	C980	2B
D982	2B	R978	1B	C981	2B
D985	2B	R979	4B	C984	2B
J LOADING MOTOR P.C.B.					
IC1	3F	S3	3F	R1	3F
Q1	4F	CN1	4F	C1	2F
D2	4F	W1	5F	C2	2F
S1	3F	W2	4F		
S2	4E	RM1	2E		

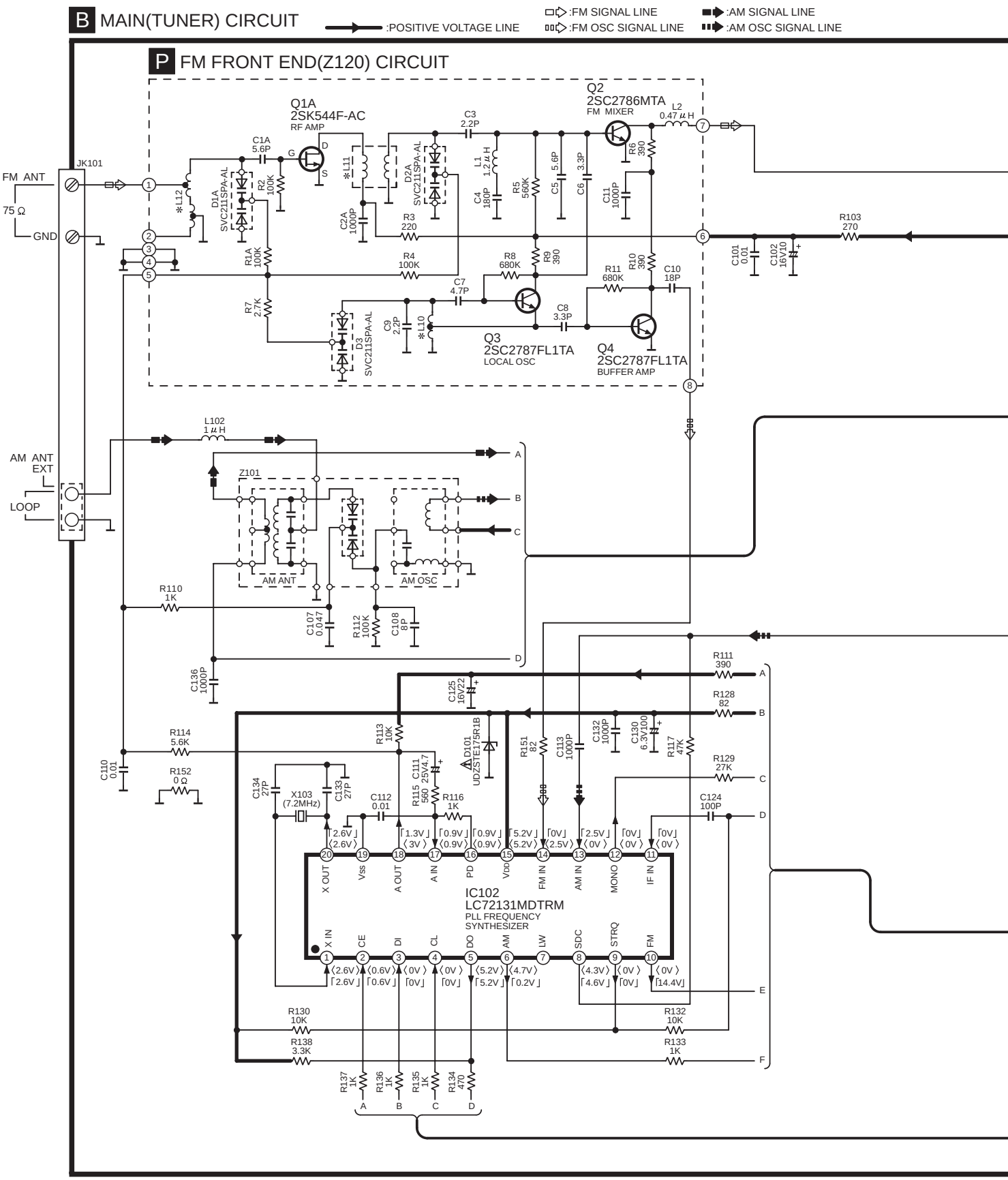
SCHEMATIC DIAGRAM–1

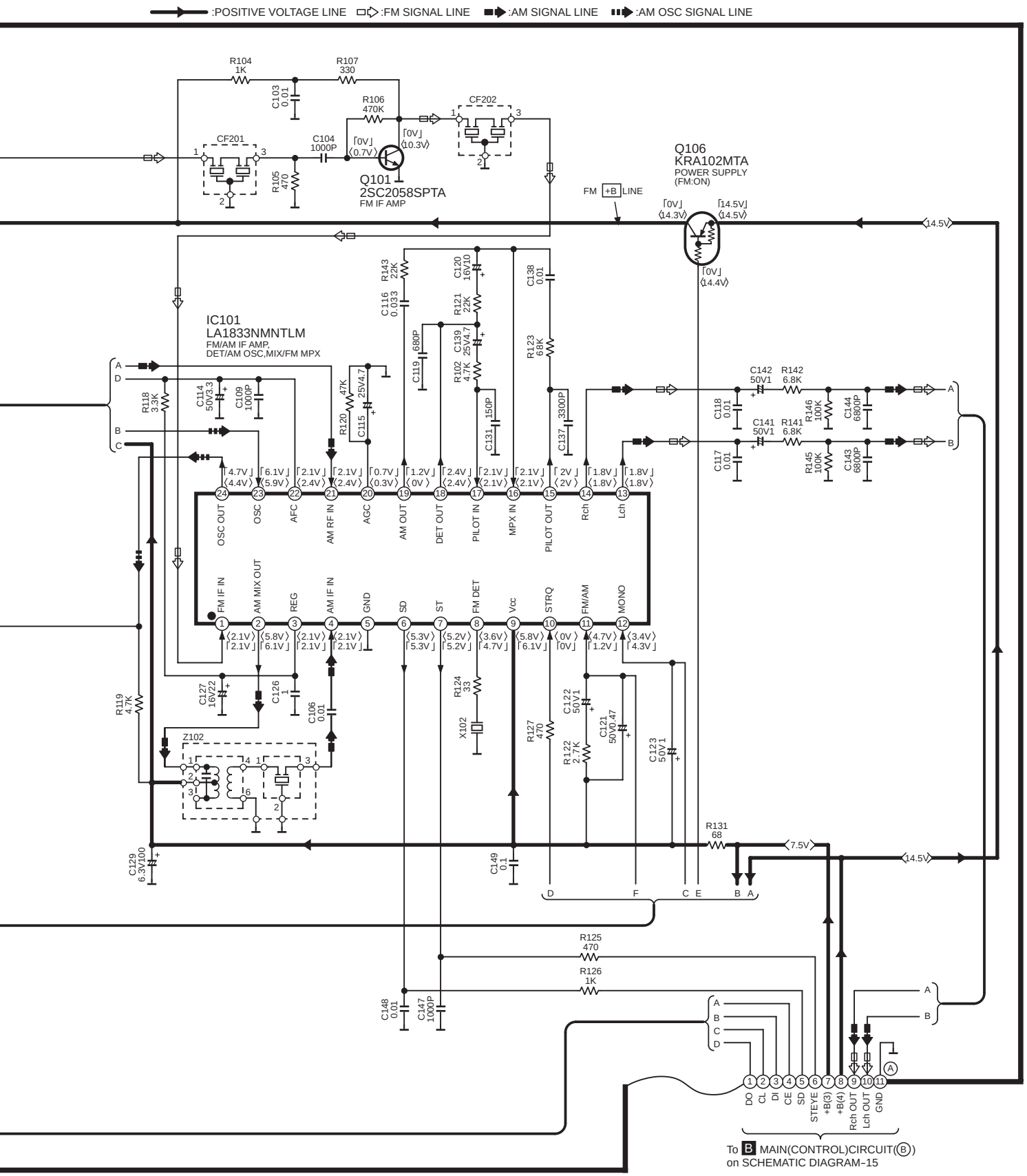
NOTE:
The number which noted at the connectors on the schematic diagram as
"SCHEMATIC DIAGRAM-1" or "SCHEMATIC DIAGRAM-2"
indicates the schematic diagram serial number located on the left corner in the schematic diagram.



SCHEMATIC DIAGRAM–2




B MAIN(TUNER) CIRCUIT
:POSITIVE VOLTAGE LINE
:FM SIGNAL LINE
:FM OSC SIGNAL LINE
:AM SIGNAL LINE
:AM OSC SIGNAL LINE
P FM FRONT END(Z120) CIRCUIT
Q1A
2SK544F-AC
RF AMP
Q2
2SC2786MTA
FM MIXER
Q3
2SC2787FL1TA
LOCAL OSC
Q4
2SC2787FL1TA
BUFFER AMP
JK101
FM ANT
75 Ω
GND
AM ANT
EXT
LOOP
Z101
AM ANT
AM OSC
IC102
LC72131MDTRM
PLL FREQUENCY
SYNTHESIZER
X OUT
Vss
A OUT
A IN
PD
VDD
FM IN
AM IN
MONO
IF IN
X IN
CE
DI
CL
DO
AM
LW
SDC
STRQ
FM
X103
(7.2MHz)
D101
UDZSTE175R1B
D1A
SVC211SPA-AL
D2A
SVC211SPA-AL
D3
SVC211SPA-AL


:POSITIVE VOLTAGE LINE
:FM SIGNAL LINE
:AM SIGNAL LINE
:AM OSC SIGNAL LINE
Q101
2SC2058SPTA
FM IF AMP
Q106
KRA102MTA
POWER SUPPLY
(FM:ON)
FM +B LINE
IC101
LA1833NMNTLM
FM/AM IF AMP,
DET/AM OSC,MIX/FM MPX
OSC OUT
OSC
AFC
AM RF IN
AGC
AM OUT
DET OUT
PILOT IN
MPX IN
PILOT OUT
Rch
Lch
FM IF IN
AM MIX OUT
REG
AM IF IN
GND
SD
ST
FM DET
Vcc
STRQ
FM/AM
MONO
14.5V
7.5V
DO
CL
DI
CE
SD
STEYE
+B(3)
+B(4)
Rch OUT
Lch OUT
GND
To B MAIN(CONTROL)CIRCUIT(B)
on SCHEMATIC DIAGRAM–15

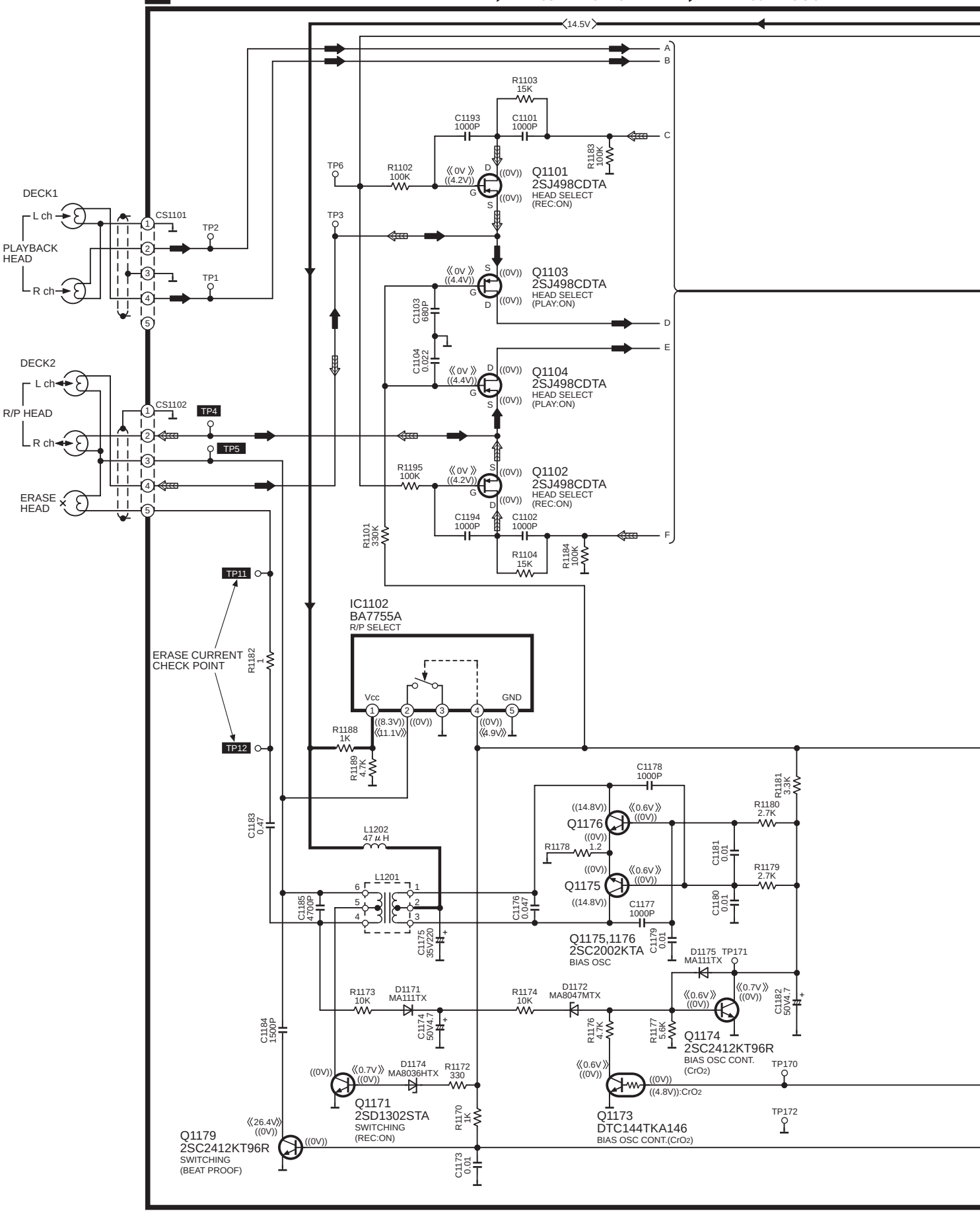
SCHEMATIC DIAGRAM-5

C MECHANISM CONTROL CIRCUIT

:POSITIVE VOLTAGE LINE

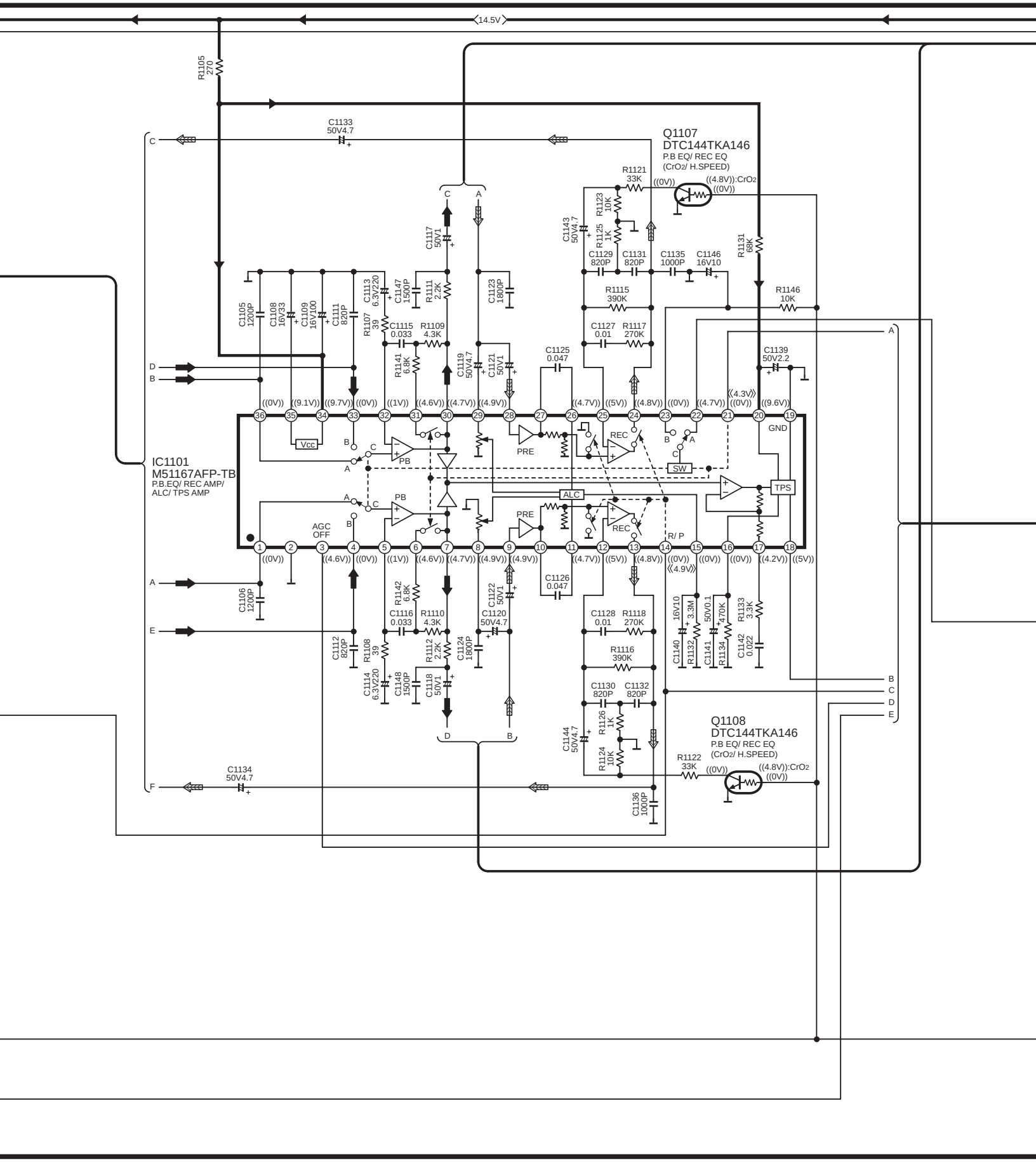
:TAPE PLAYBACK SIGNAL LINE

:TAPE RECORDING SIGNAL LINE



SCHEMATIC DIAGRAM-6

:TAPE PLAYBACK SIGNAL LINE
:POSITIVE VOLTAGE LINE
:TAPE RECORDING SIGNAL LINE



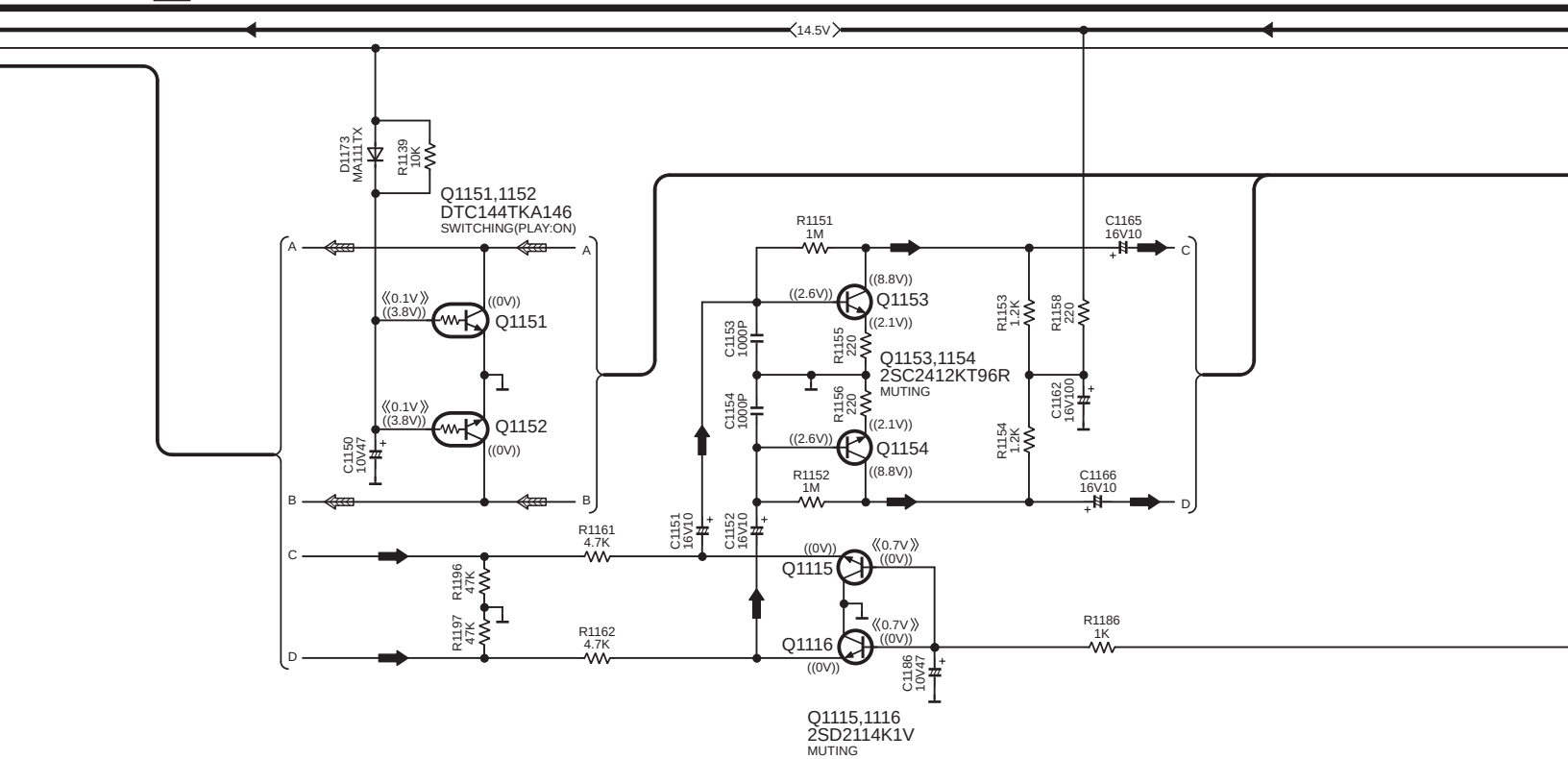
SCHEMATIC DIAGRAM-7

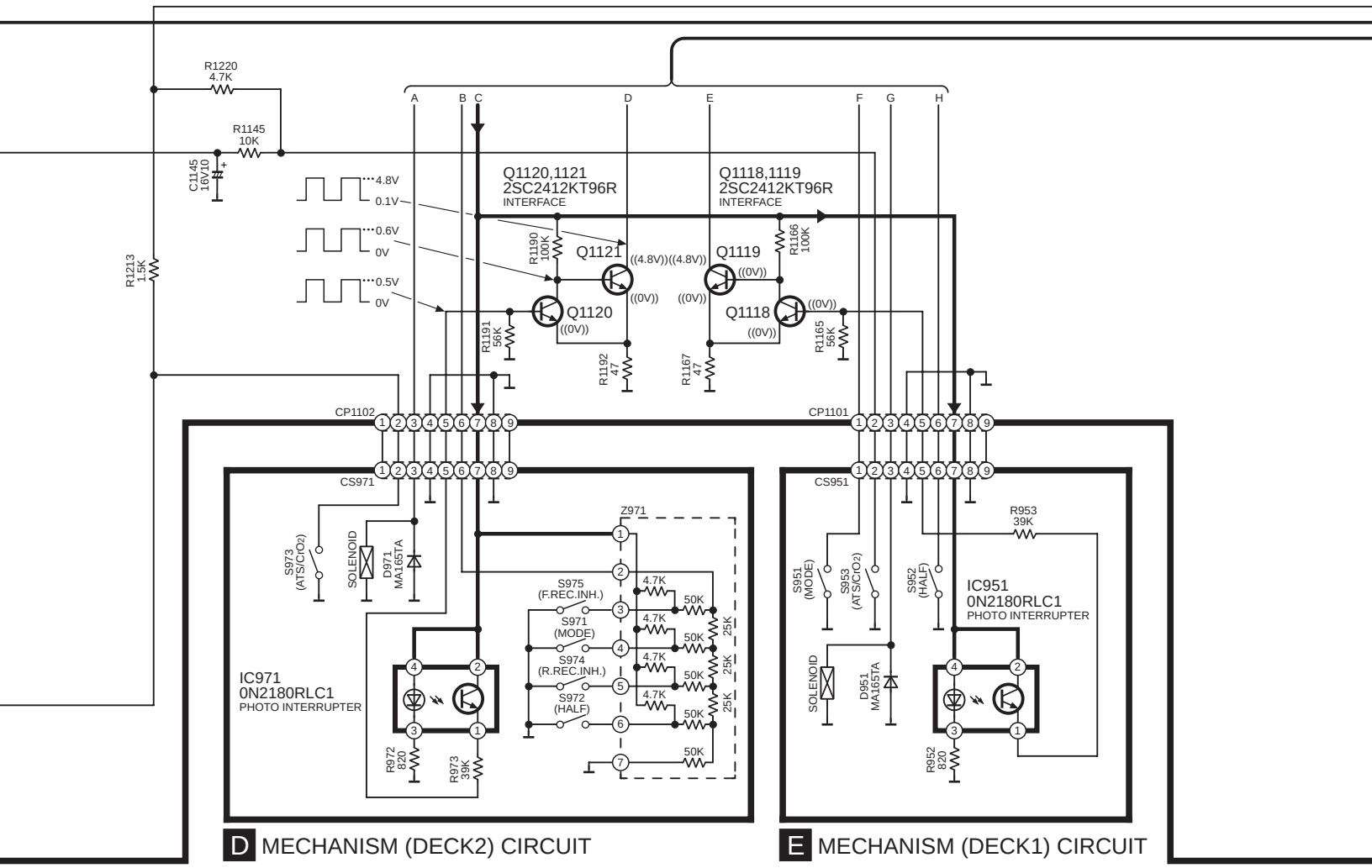
C MECHANISM CONTROL CIRCUIT

:POSITIVE VOLTAGE LINE

:TAPE PLAYBACK SIGNAL LINE

: TAPE RECORDING SIGNAL LINE

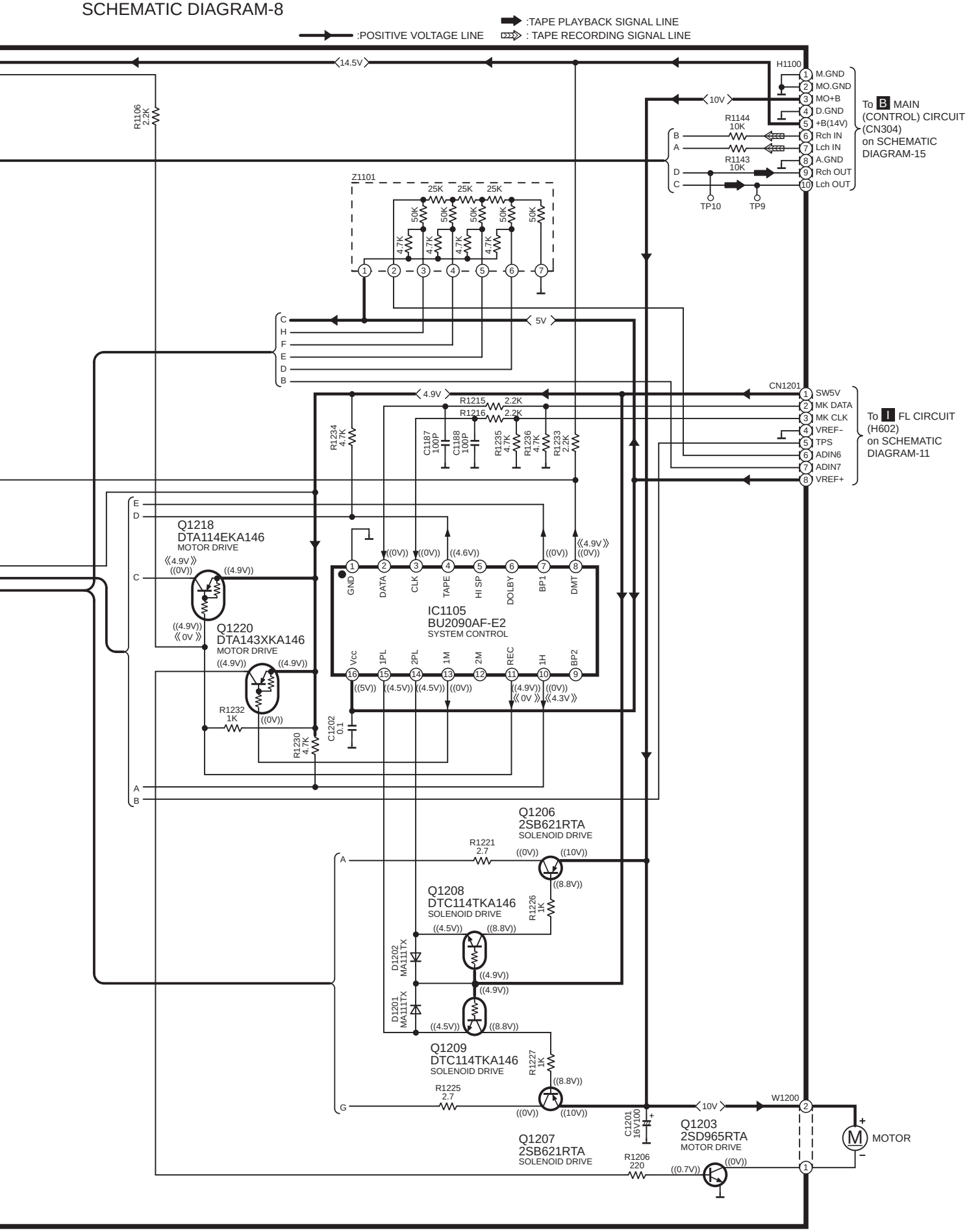




D MECHANISM (DECK2) CIRCUIT

E MECHANISM (DECK1) CIRCUIT

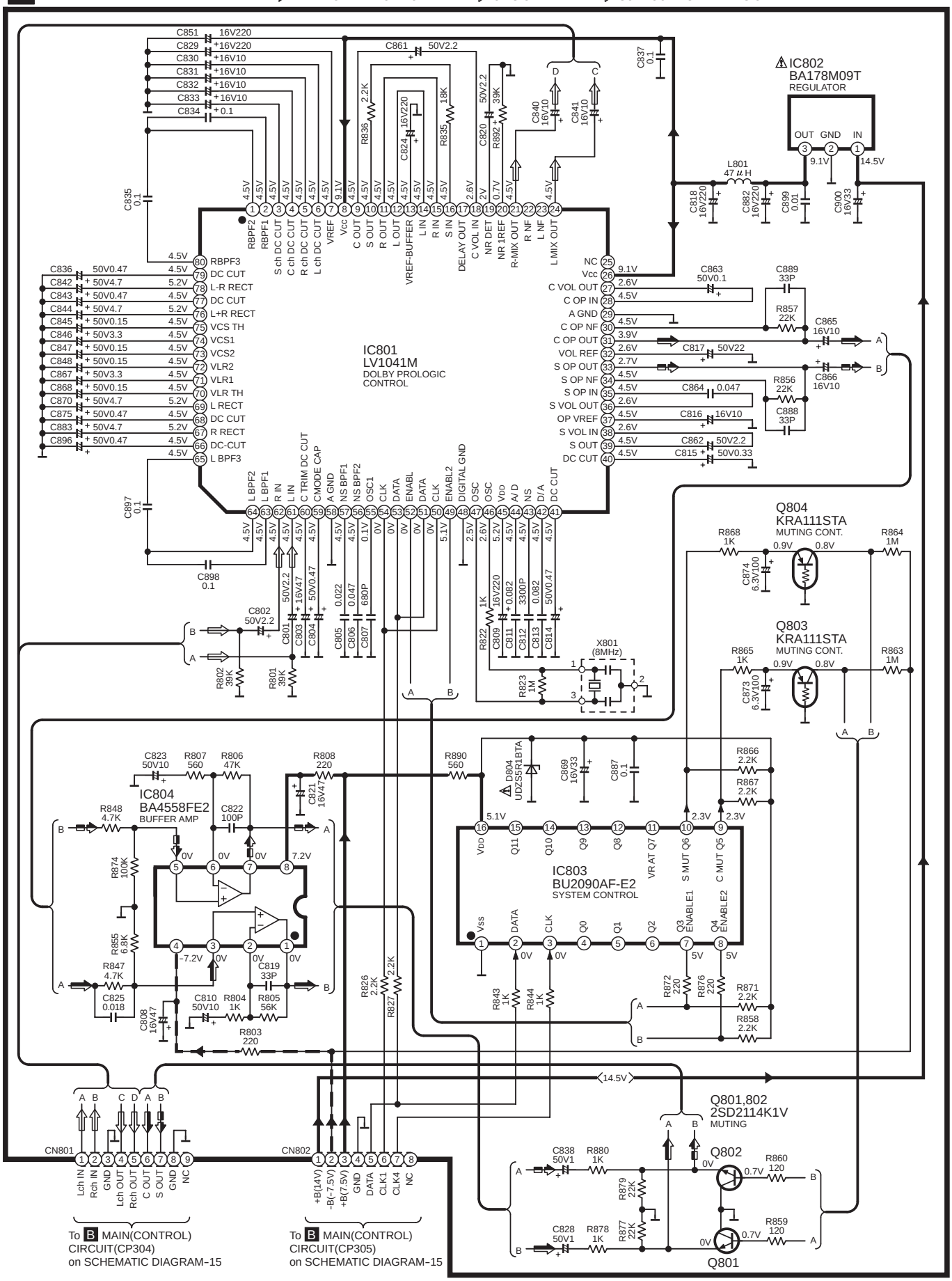
SCHEMATIC DIAGRAM-8



SCHEMATIC DIAGRAM–9

F DPL CIRCUIT

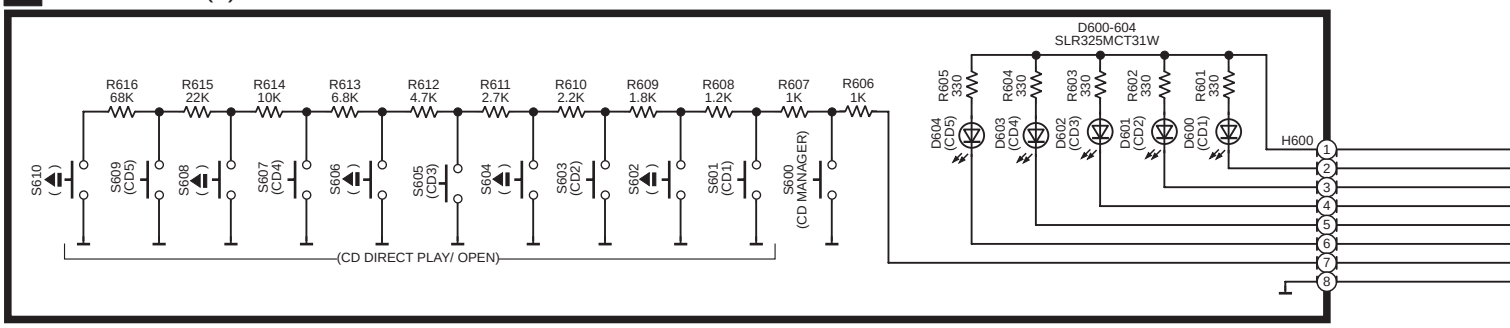
:POSITIVE VOLTAGE LINE
:NEGATIVE VOLTAGE LINE
:CD SIGNAL LINE
:CENTER SP. DRIVE SIGNAL LINE
:SURROUND SP. DRIVE SIGNAL LINE



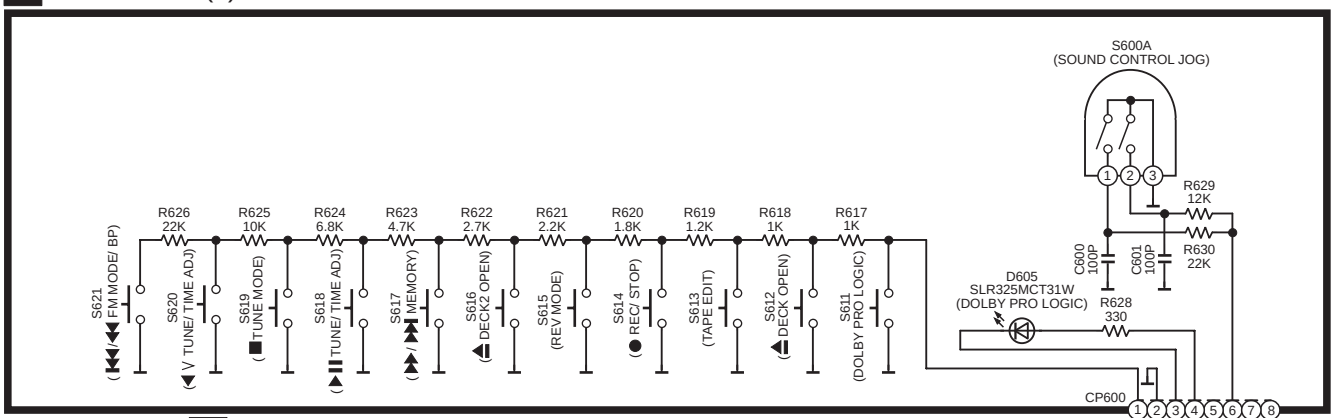
SCHEMATIC DIAGRAM–10

G OPERATION(1) CIRCUIT

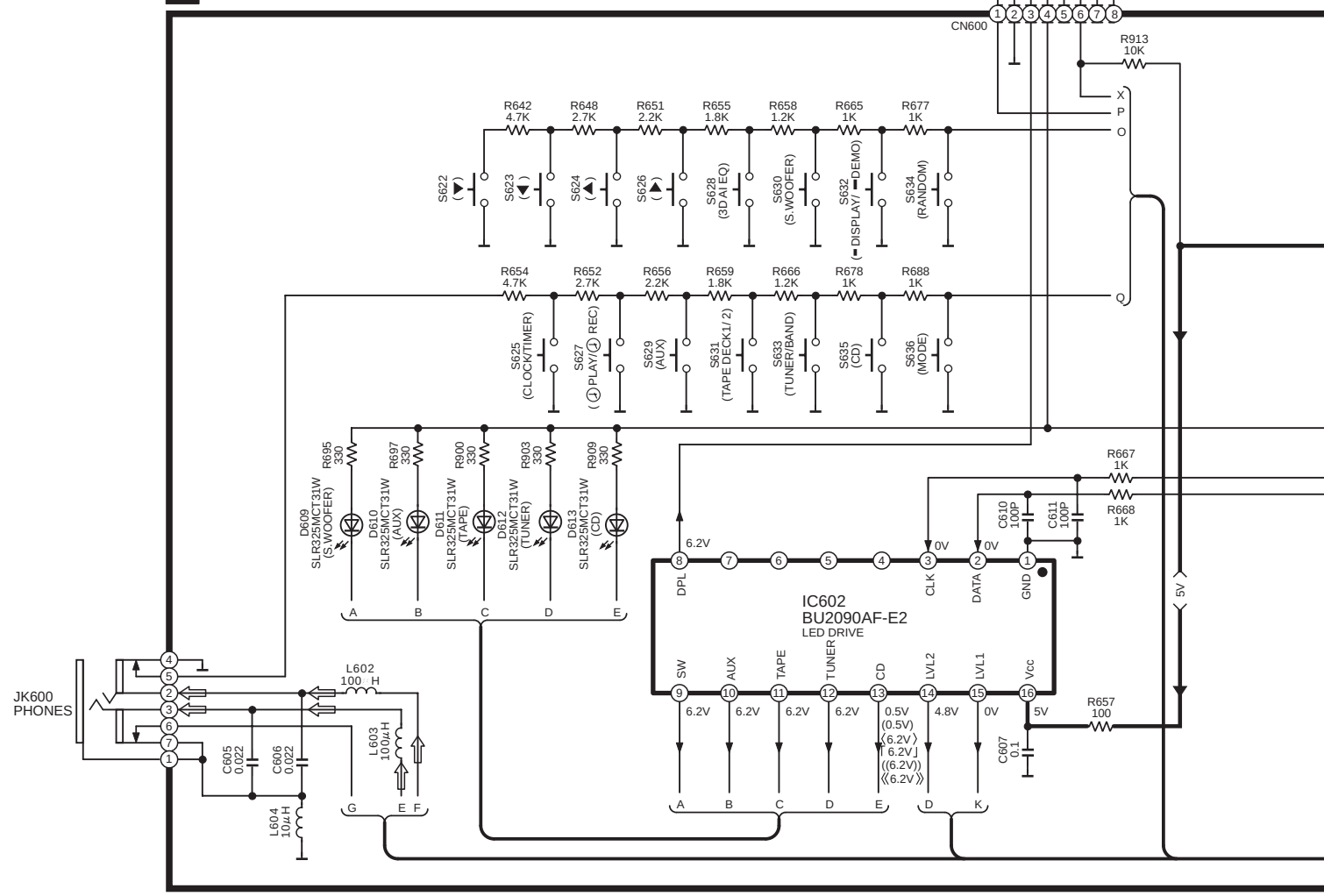
:POSITIVE VOLTAGE LINE :CD SIGNAL LINE



H OPERATION(2) CIRCUIT

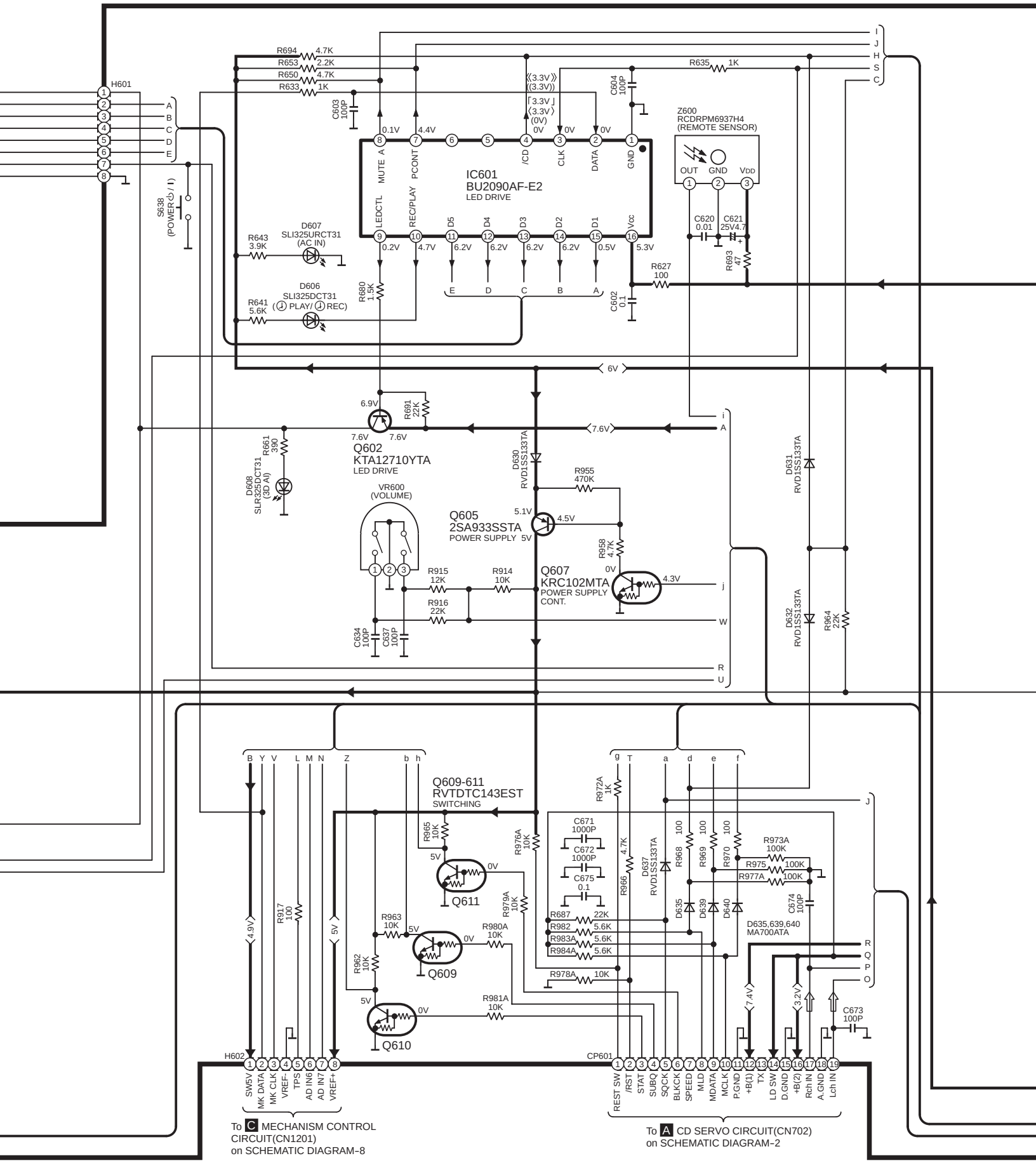


I FL CIRCUIT



SCHEMATIC DIAGRAM–11

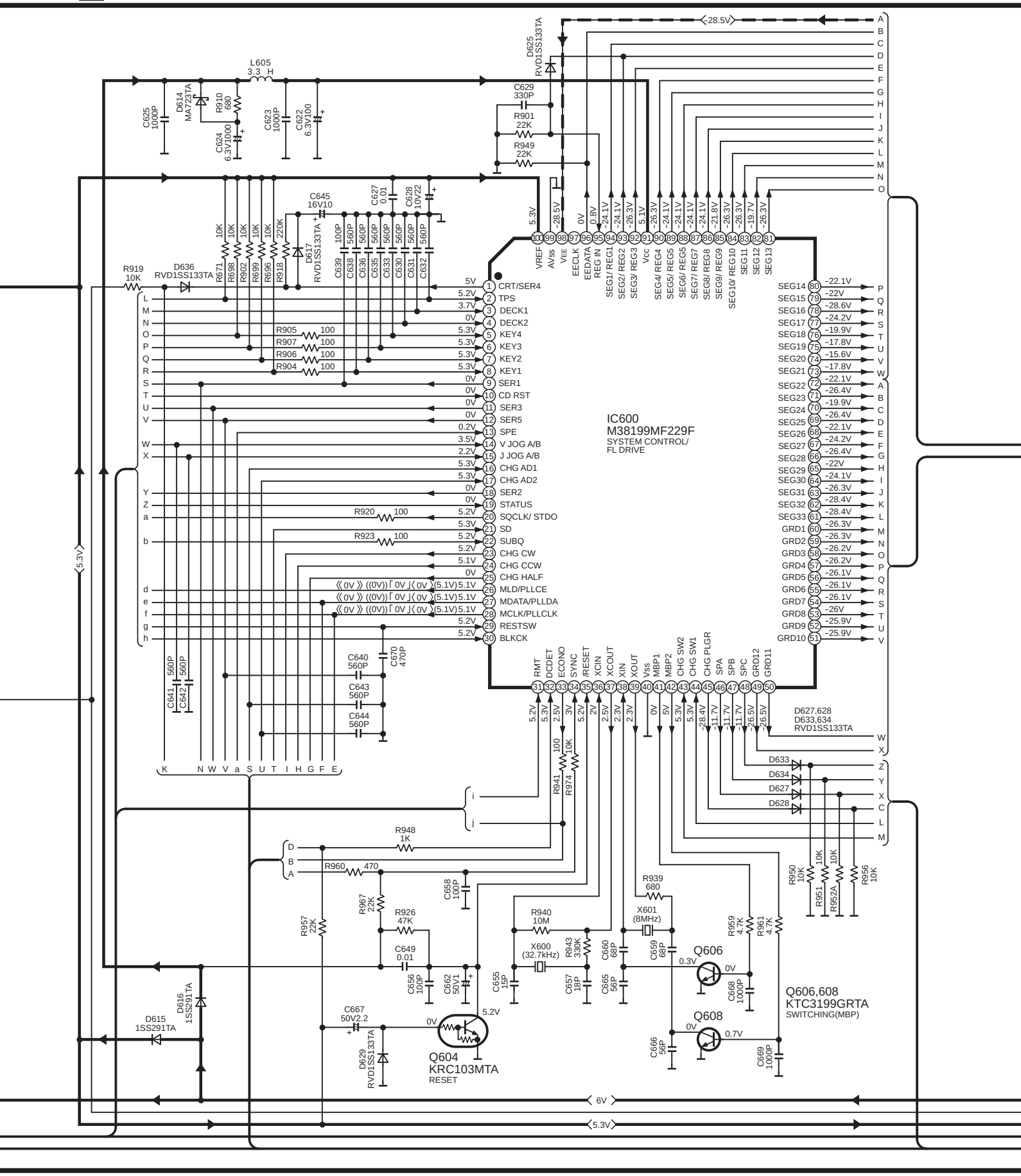
:POSITIVE VOLTAGE LINE :CD SIGNAL LINE



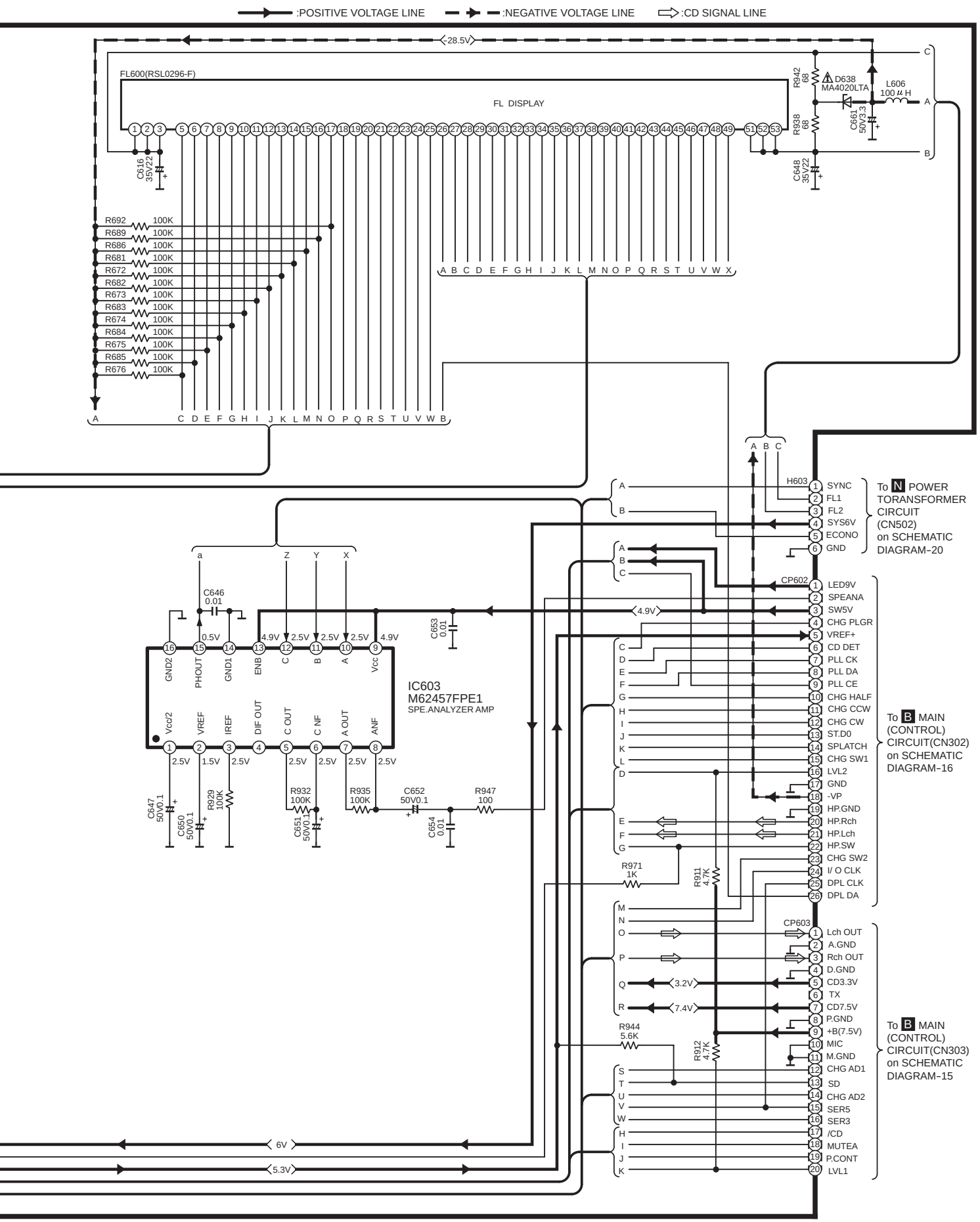
SCHEMATIC DIAGRAM–12

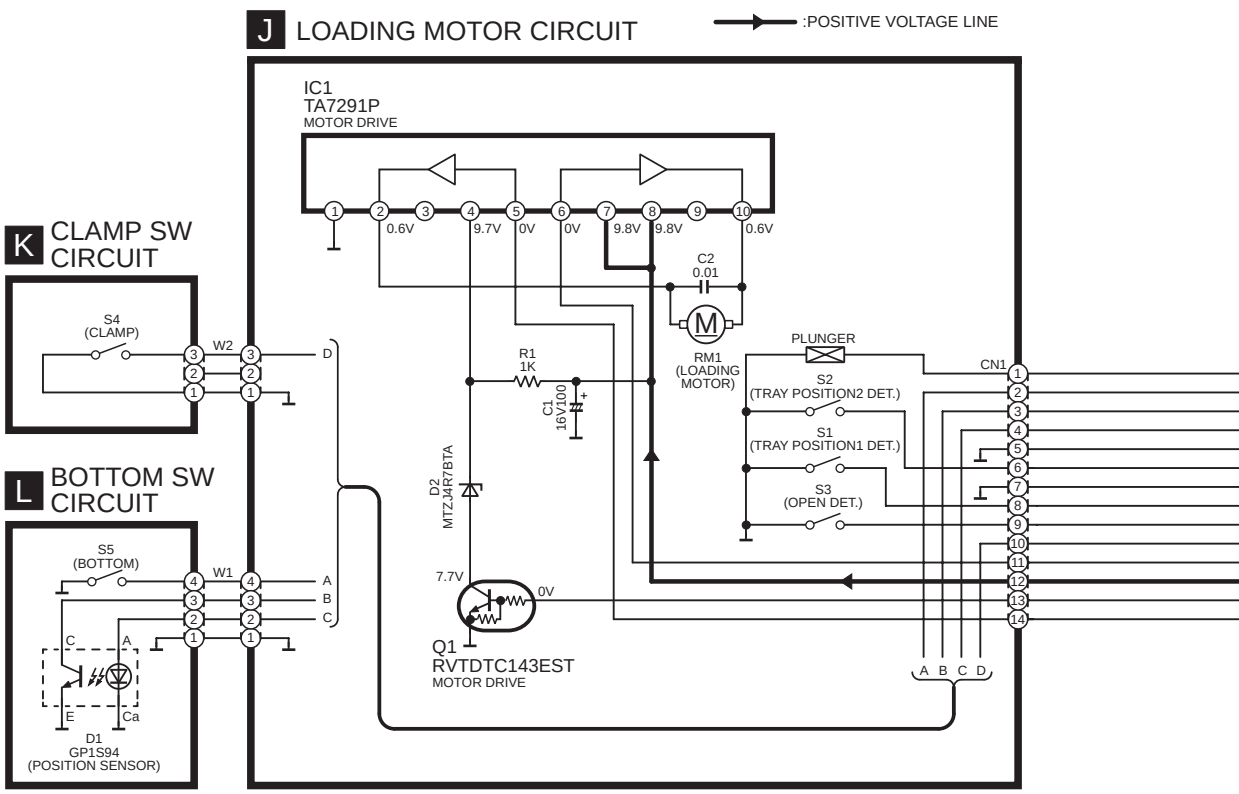
I FL CIRCUIT

:POSITIVE VOLTAGE LINE — :NEGATIVE VOLTAGE LINE



SCHEMATIC DIAGRAM–13




J LOADING MOTOR CIRCUIT
:POSITIVE VOLTAGE LINE
IC1
TA7291P
MOTOR DRIVE
0.6V
9.7V
0V
0V
9.8V
9.8V
0.6V
C2
0.01
M
RM1
(LOADING
MOTOR)
PLUNGER
R1
1K
C1
16V100
S2
(TRAY POSITION2 DET.)
S1
(TRAY POSITION1 DET.)
S3
(OPEN DET.)
CN1
D2
MTZJ4R7BTA
7.7V
0V
Q1
RVTDTC143EST
MOTOR DRIVE
A B C D
K CLAMP SW
CIRCUIT
S4
(CLAMP)
W2
D
L BOTTOM SW
CIRCUIT
S5
(BOTTOM)
W1
A
B
C
C
A
E
Ca
D1
GP1S94
(POSITION SENSOR)

SCHEMATIC DIAGRAM–15

:POSITIVE VOLTAGE LINE
:NEGATIVE VOLTAGE LINE
:CD SIGNAL LINE
:FM SIGNAL LINE
:AM SIGNAL LINE
:CENTER SP. DRIVE SIGNAL LINE
:SURROUND SP. DRIVE SIGNAL LINE
:TAPE PLAYBACK SIGNAL LINE
:TAPE RECORDING SIGNAL LINE

B MAIN(CONTROL) CIRCUIT

To I FL CIRCUIT(CP603) on SCHEMATIC DIAGRAM–13

CN303: Lch IN, A.GND, Rch IN, D.GND, CD 3.3V, TX, CD 7.5V, P.GND, +B(7.5V), MIC, M.GND, CHG AD1, SD, CHG AD2, SER5, SER3, /CD, MUTEA, P.CONT, LVL1

JK305 AUX L ch / R ch

To C MECHANISM CONTROL CIRCUIT (H1100) on SCHEMATIC DIAGRAM–8

CN304: M.GND, MO.GND, MO +B, D.GND, +B(14V), Rch OUT, Lch OUT, A.GND, Rch IN, Lch IN

To B MAIN(TUNER) CIRCUIT(A) on SCHEMATIC DIAGRAM–4

DO, CL, DI, CE, SD, ST EYE, +B(3), +B(4), Rch IN, Lch IN, GND

To F DPL CIRCUIT (CN802) on SCHEMATIC DIAGRAM–9

CP305: +B(14V), -B(-7.5V), +B(7.5V), GND, DATA, CLK1, CLK4, NC

To F DPL CIRCUIT (CN801) on SCHEMATIC DIAGRAM–9

CP304: Lch OUT, Rch OUT, GND, Lch IN, Rch IN, C IN, S IN, GND, NC

Q350 2SB621ARSTA PLUNGER DRIVE

Q351 KRC102STA PLUNGER DRIVE

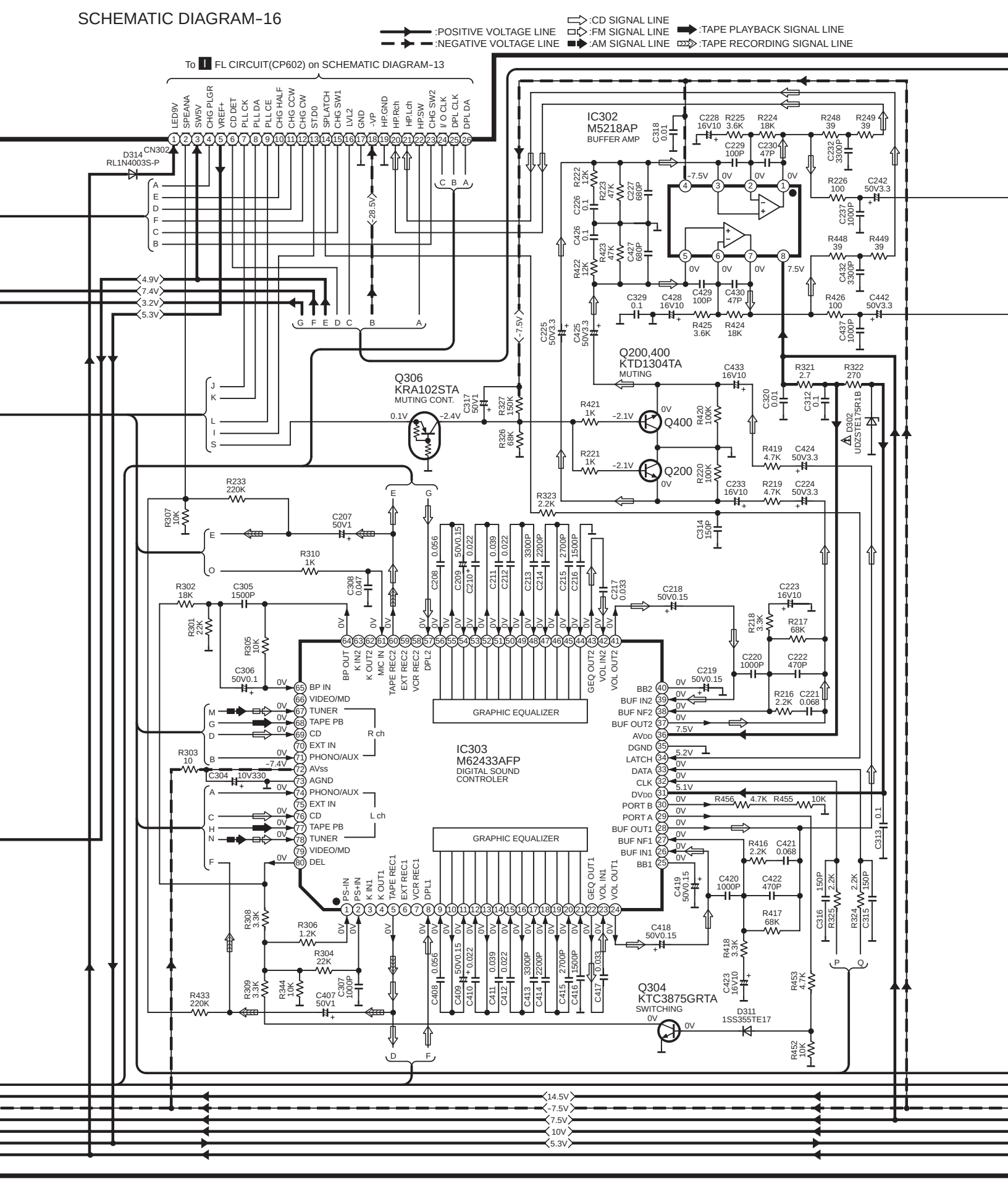
CN309

D316 RL1N4003S-P

D312 RL1N4003S-P

SCHEMATIC DIAGRAM–16

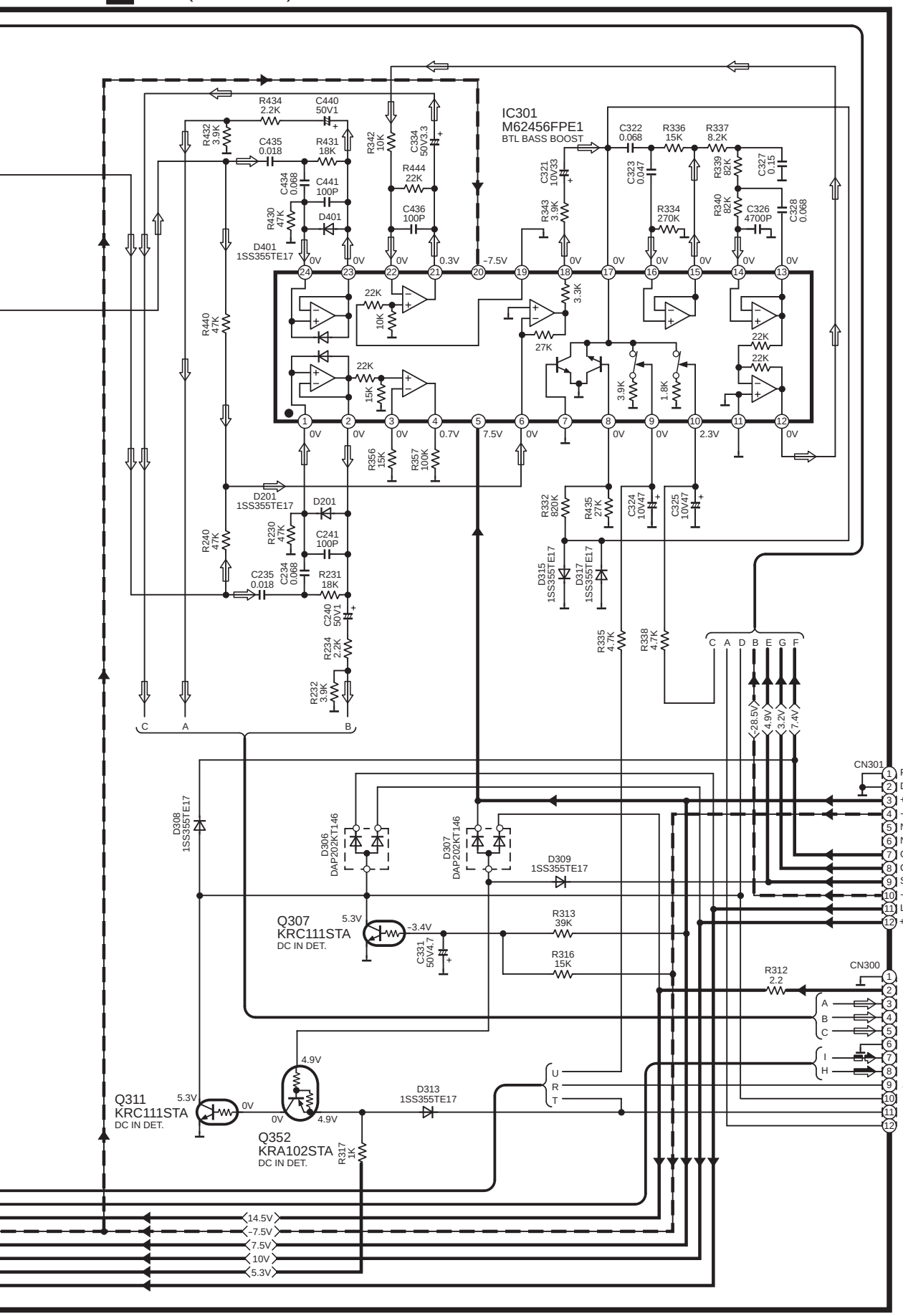
:POSITIVE VOLTAGE LINE
:NEGATIVE VOLTAGE LINE
:CD SIGNAL LINE
:FM SIGNAL LINE
:AM SIGNAL LINE
:TAPE PLAYBACK SIGNAL LINE
:TAPE RECORDING SIGNAL LINE



SCHEMATIC DIAGRAM–17

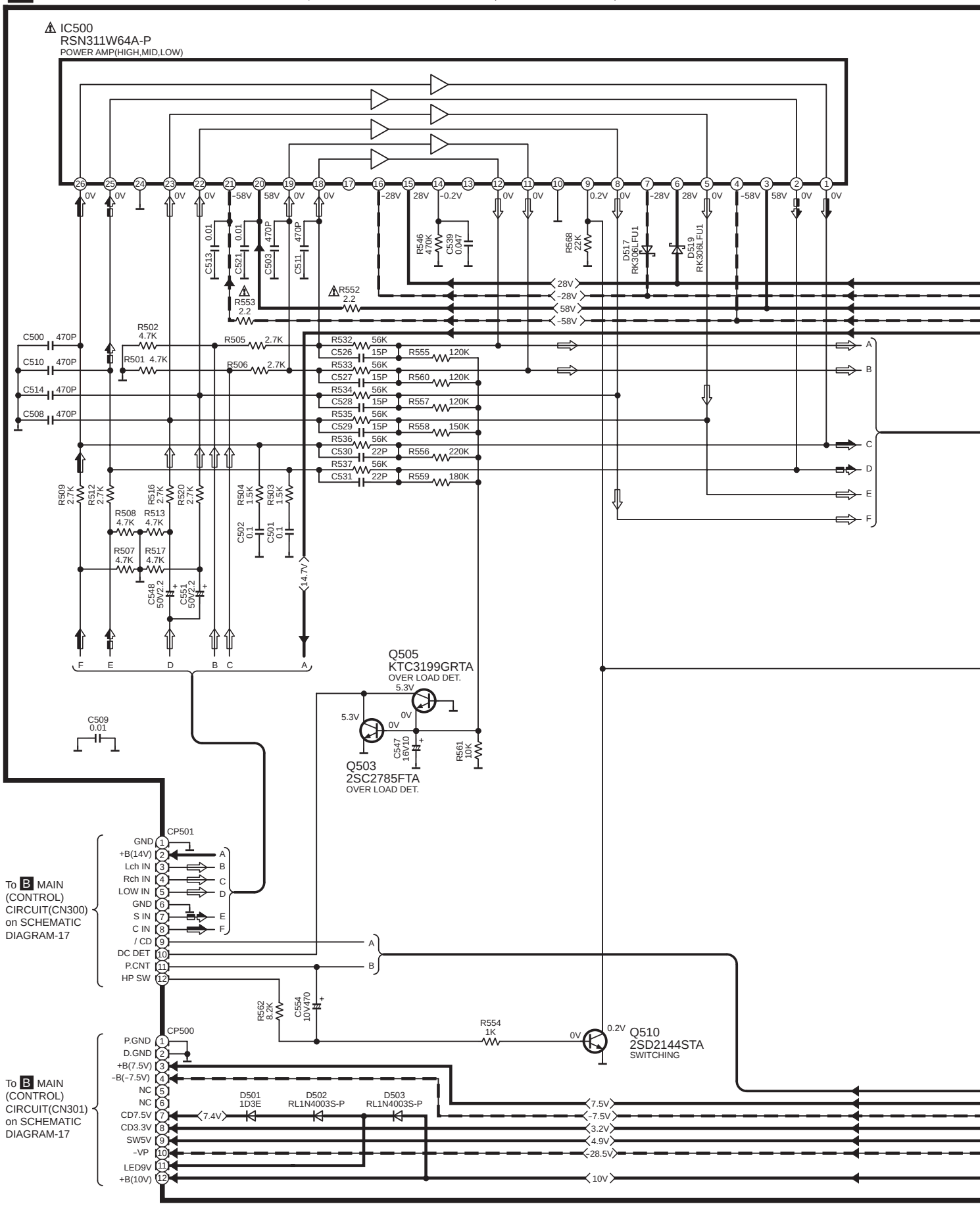
B MAIN(CONTROL) CIRCUIT

:POSITIVE VOLTAGE LINE
:NEGATIVE VOLTAGE LINE
:CD SIGNAL LINE
:CENTER SP. DRIVE SIGNAL LINE
:SURROUND SP. DRIVE SIGNAL LINE

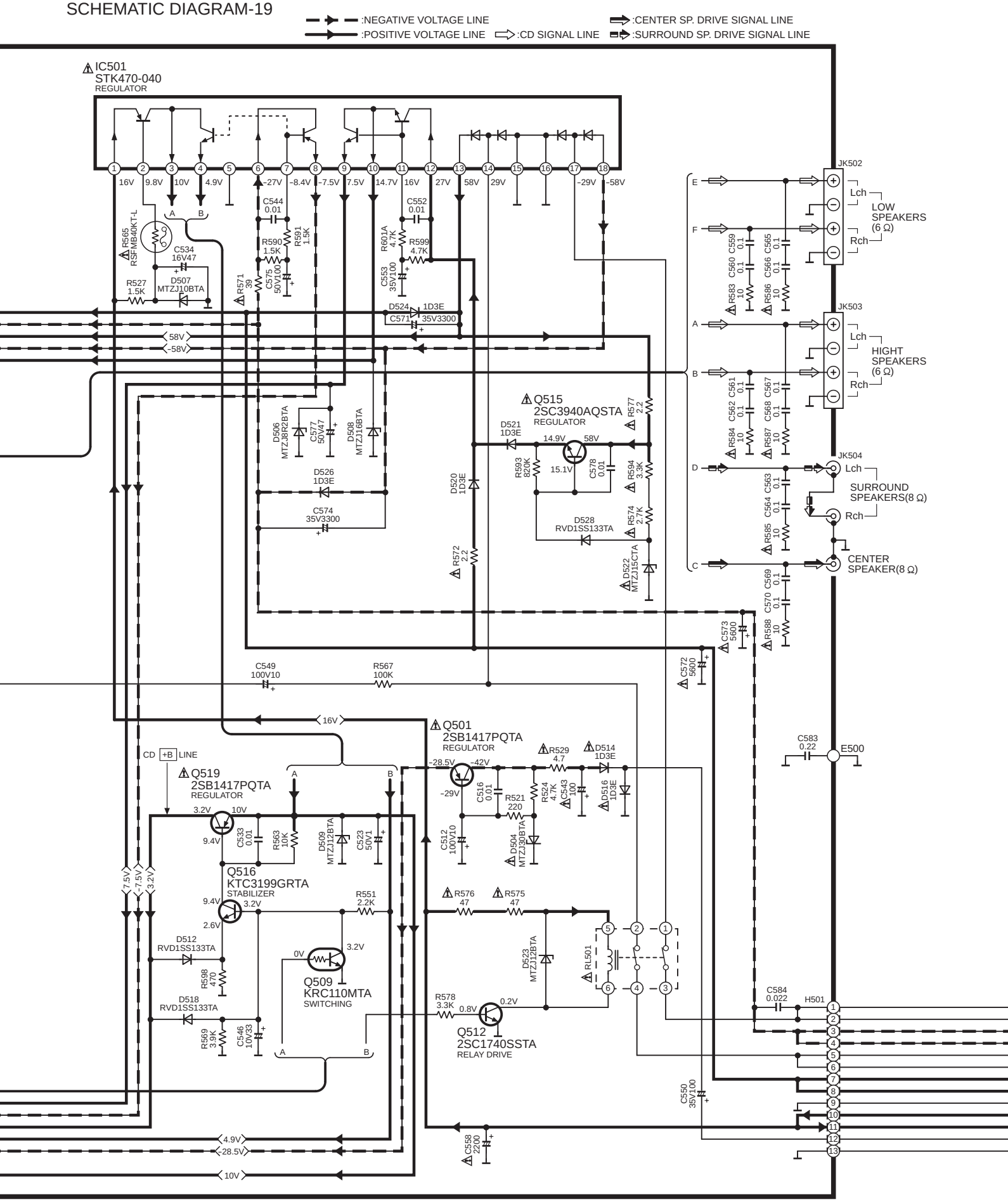


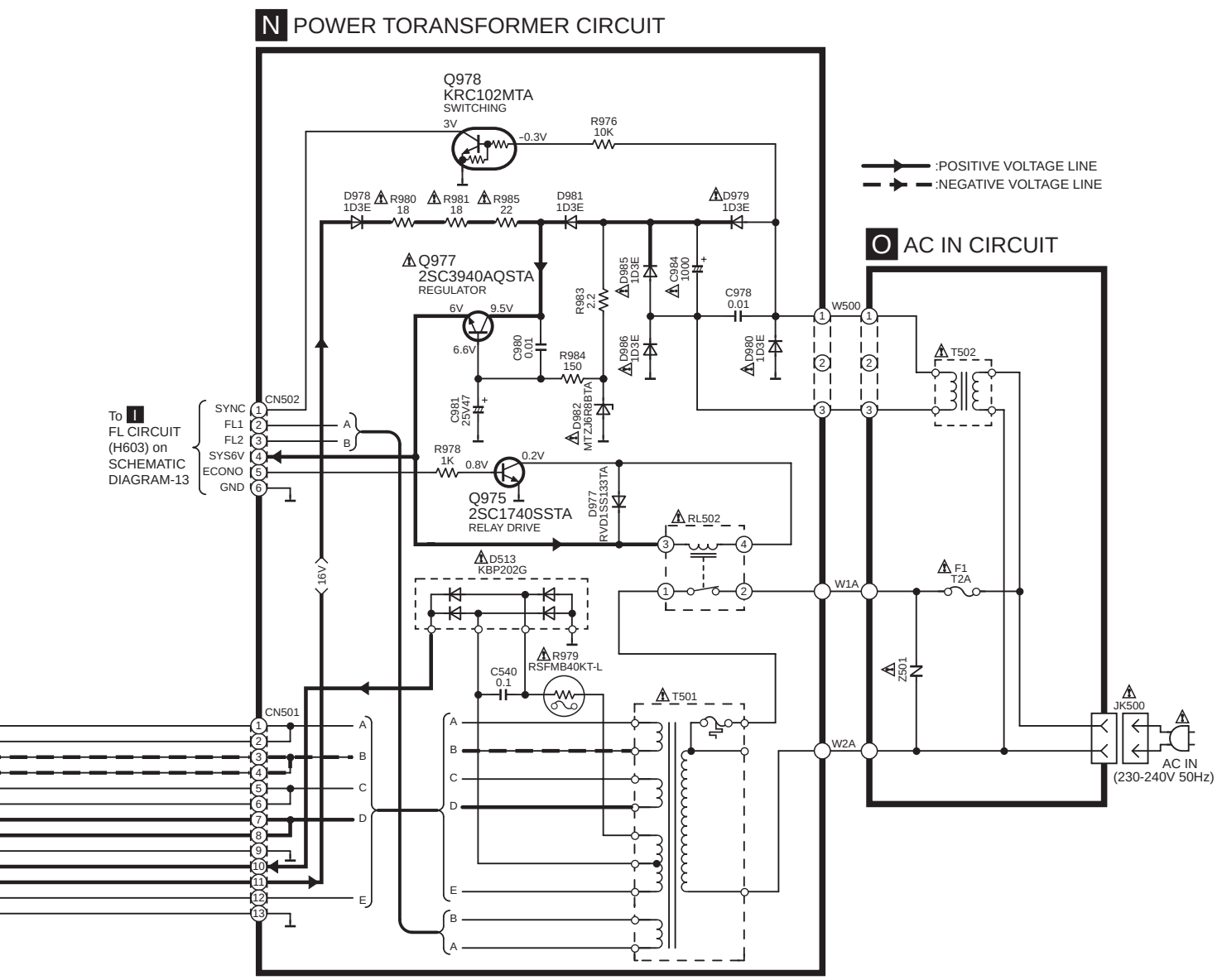
SCHEMATIC DIAGRAM-18
M POWER AMP CIRCUIT

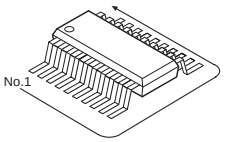
:NEGATIVE VOLTAGE LINE
:POSITIVE VOLTAGE LINE
:CD SIGNAL LINE
:CENTER SP. DRIVE SIGNAL LINE
:SURROUND SP. DRIVE SIGNAL LINE



SCHEMATIC DIAGRAM-19

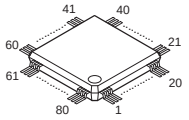



N POWER TORANSFORMER CIRCUIT
Q978
KRC102MTA
SWITCHING
3V
−0.3V
R976
10K
:POSITIVE VOLTAGE LINE
:NEGATIVE VOLTAGE LINE
D978 1D3E
R980 18
R981 18
R985 22
D981 1D3E
D979 1D3E
O AC IN CIRCUIT
Q977
2SC3940AQSTA
REGULATOR
6V
9.5V
6.6V
R983 2.2
D985 1D3E
C984 1000
C978 0.01
C980 0.01
R984 150
D986 1D3E
D980 1D3E
W500
T502
C981 25V47
D982 MTZJ6R8BTA
To I
FL CIRCUIT
(H603) on
SCHEMATIC
DIAGRAM-13
CN502
SYNC
FL1
FL2
SYS6V
ECONO
GND
R978 1K
0.8V
0.2V
Q975
2SC1740SSTA
RELAY DRIVE
D977 RVD1SS133TA
RL502
D513
KBP202G
16V
W1A
F1
T2A
R979
RSFMB40KT-L
C540 0.1
Z501
T501
JK500
W2A
AC IN
(230-240V 50Hz)
CN501

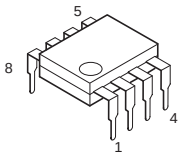


AN8839NSBE2	28PIN
BU2090AF-E2	16PIN
LA1833NMNTLM	24PIN
LC72131MDTRM	20PIN
M51167AFP-TB	36PIN
M62456FPE1	24PIN
M62457FPE1	16PIN

MN662790RSC



M5218AP



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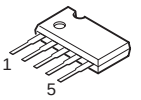

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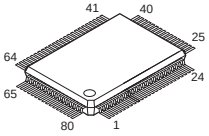
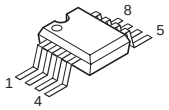
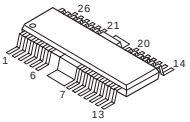


BA4558FE2



AN8739SBE2



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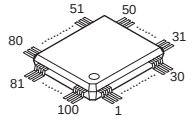

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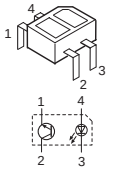

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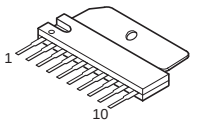
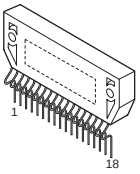


STK470-040



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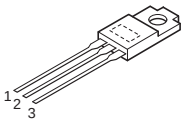

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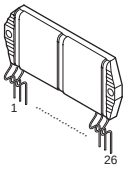
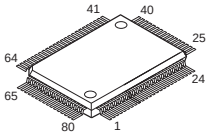
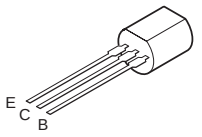
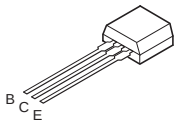


LV1041M





2SB621ARSTA
2SB621RTA
2SD1302STA
2SD965RTA
KTA12710YTA



2SA933SSTA
2SC1740SSTA
2SC2058SPTA
2SD2144STA
KRA102MTA

KRC102MTA
KRC103MTA
KRC110MTA
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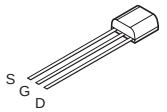
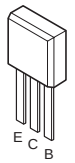
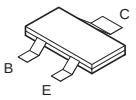
RVTDTC143EST

2SJ498CDTA





2SC2002KTA
2SC2785FTA
2SC2786MTA
2SC2787FL1TA



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DTA143XKA146
DTC114TKA146
DTC144TKA146

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KRA111STA
KRC102STA
KRC111STA
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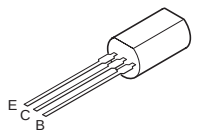

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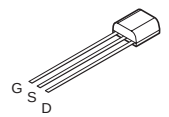
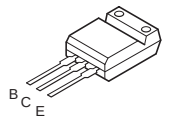
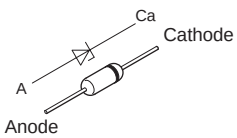


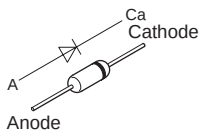
2SB1417PQTA



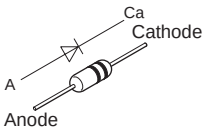


MTZJ10BTA
MTZJ12BTA
MTZJ15CTA
MTZJ16BTA
MTZJ30BTA
MTZJ4R7BTA
MTZJ6R8BTA
MTZJ8R2BTA

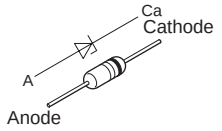
MA165TA
RVD1SS133TA



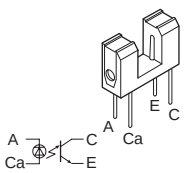
1SS291TA
MA700ATA

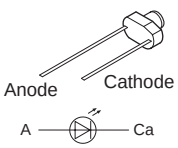


MA4020LTA



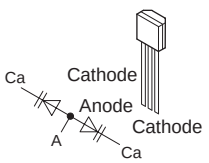
GP1S94



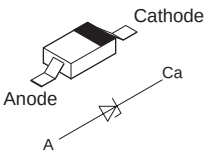


SLI325DCT31
SLI325URCT31
SLR325DCT31
SLR325MCT31W

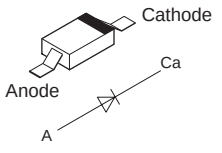
SVC211SPA-AL



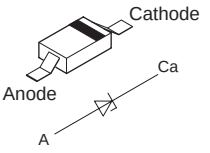
UDZSTE175R1B
UDZS5R1BTA



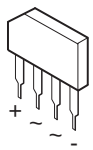
MA111TX
1SS355TE17



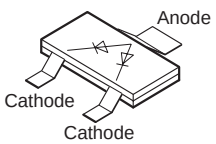
MA8036HTX
MA8047MTX



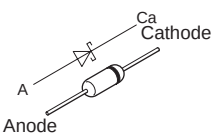
KBP202G



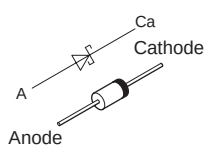
DAP202KT146



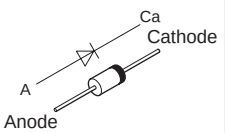
MA723TA

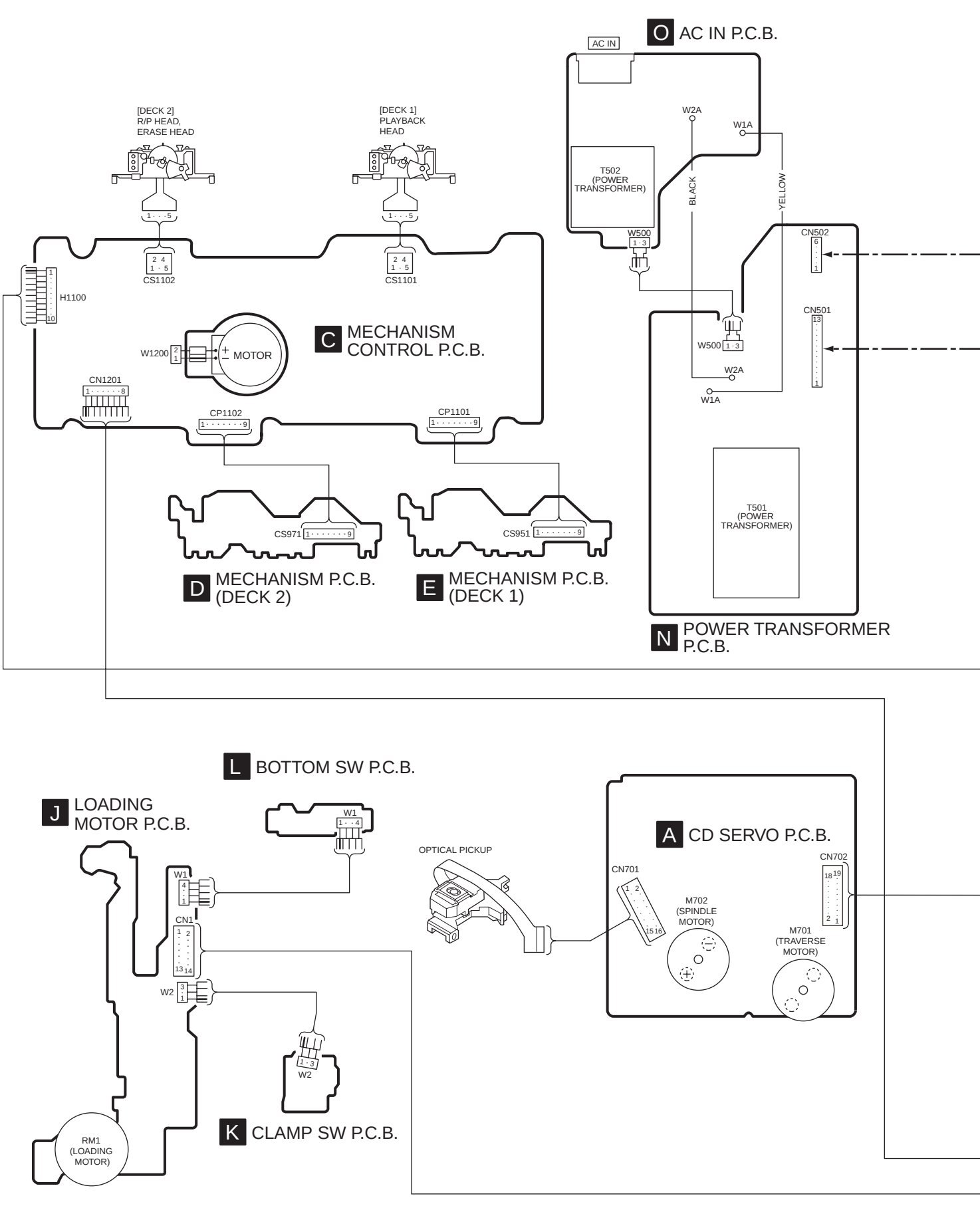


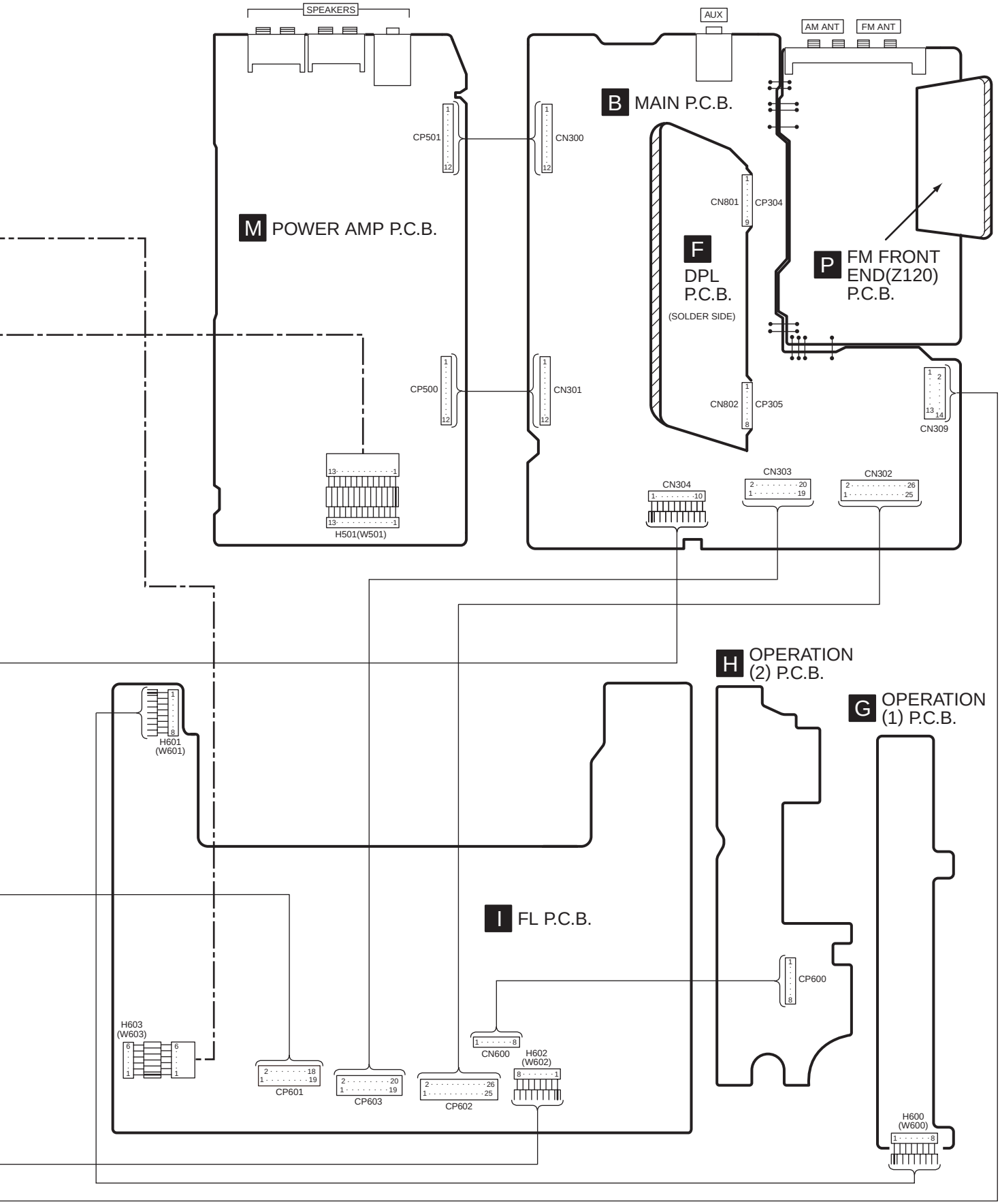
RK306LFU1

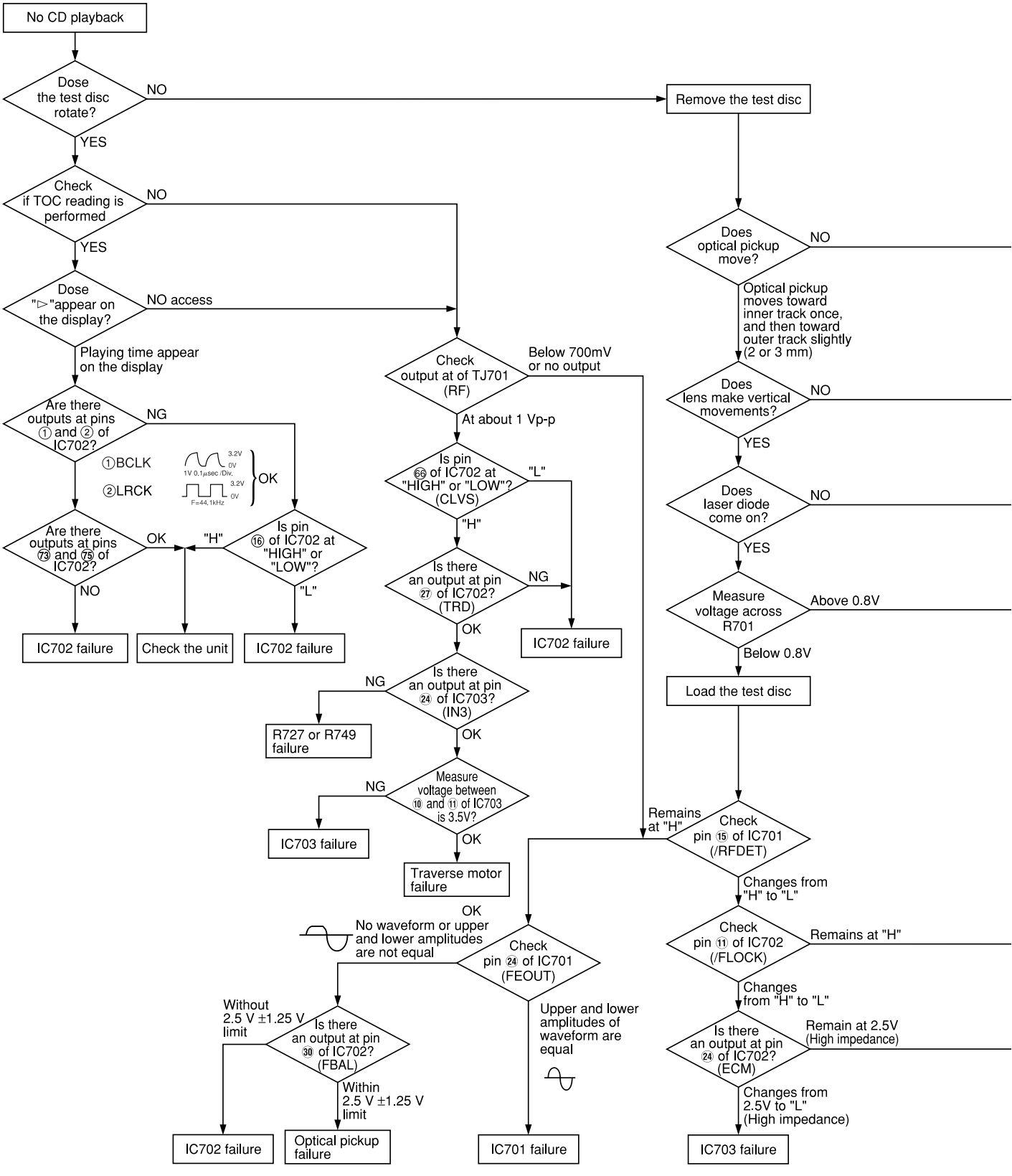


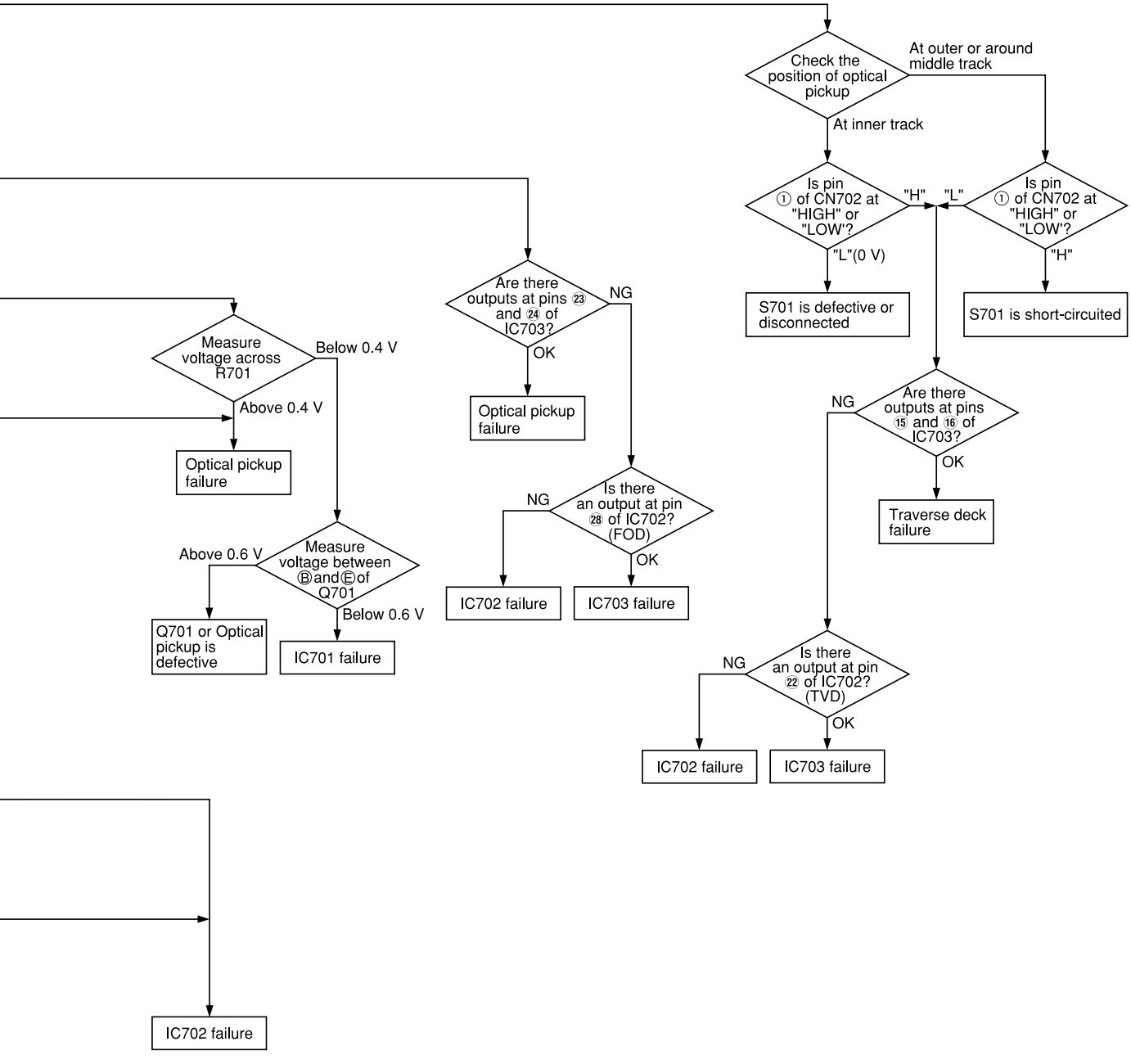
1D3E
RL1N4003S-P



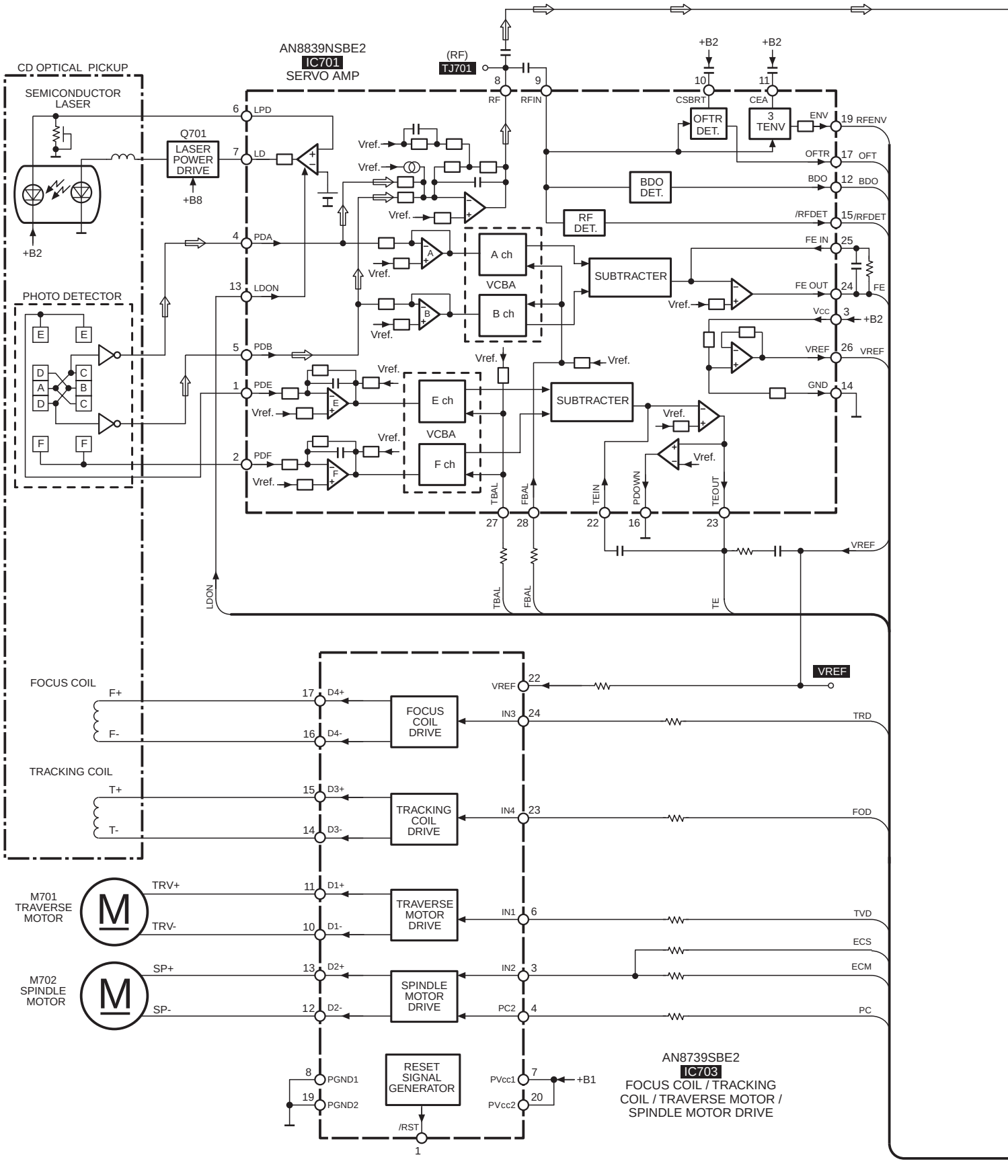

O AC IN P.C.B.
AC IN
W2A
W1A
T502
(POWER
TRANSFORMER)
BLACK
YELLOW
W500
CN502
CN501
[DECK 2]
R/P HEAD,
ERASE HEAD
[DECK 1]
PLAYBACK
HEAD
CS1102
CS1101
H1100
W1200
MOTOR
C MECHANISM
CONTROL P.C.B.
CN1201
CP1102
CP1101
CS971
CS951
D MECHANISM P.C.B.
(DECK 2)
E MECHANISM P.C.B.
(DECK 1)
T501
(POWER
TRANSFORMER)
N POWER TRANSFORMER
P.C.B.
L BOTTOM SW P.C.B.
J LOADING
MOTOR P.C.B.
W1
CN1
W2
RM1
(LOADING
MOTOR)
K CLAMP SW P.C.B.
OPTICAL PICKUP
A CD SERVO P.C.B.
CN701
CN702
M702
(SPINDLE
MOTOR)
M701
(TRAVERSE
MOTOR)

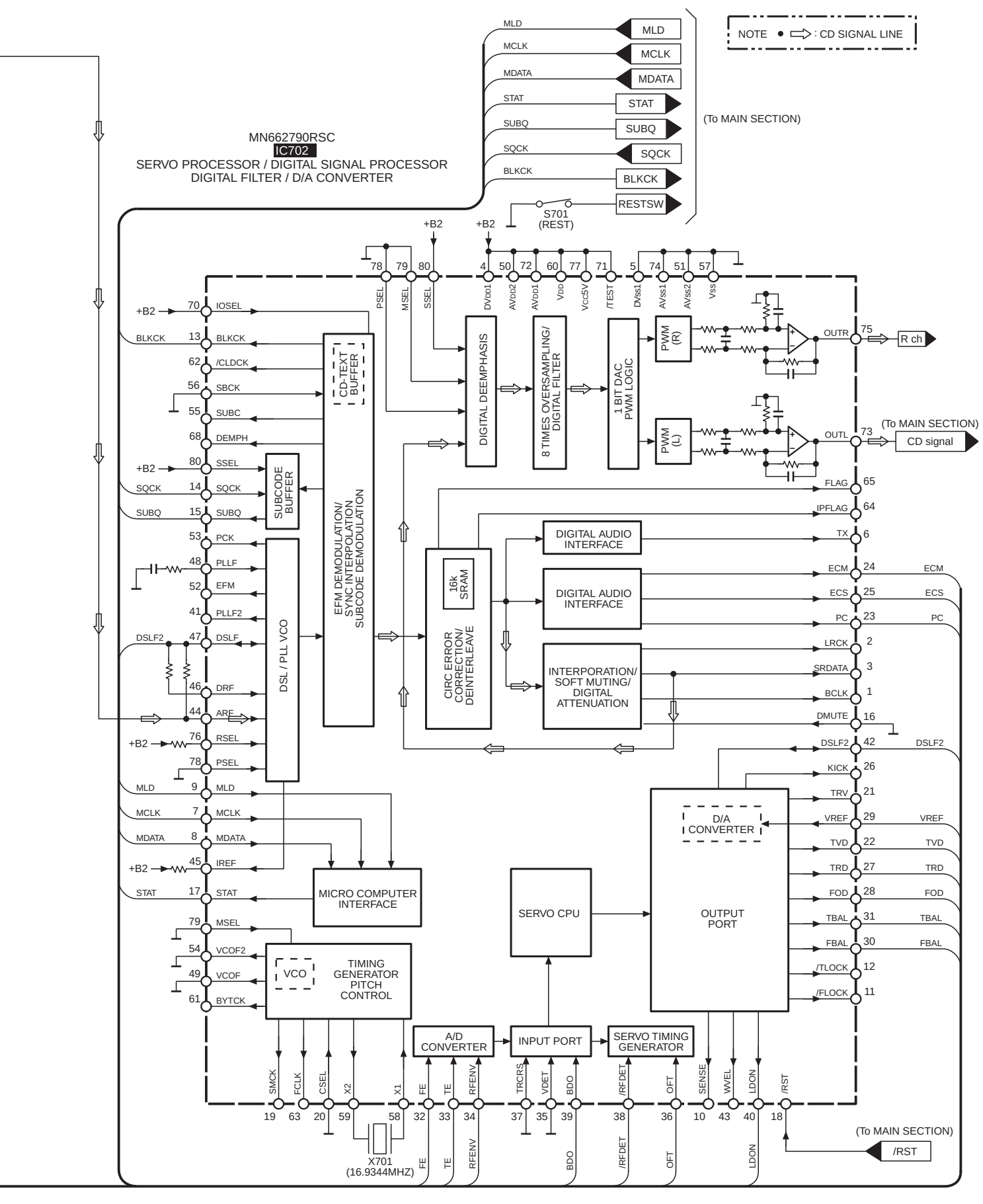

SPEAKERS
AUX
AM ANT
FM ANT
B MAIN P.C.B.
M POWER AMP P.C.B.
CP501
CN300
CP500
CN301
CN801
CP304
CN802
CP305
F DPL P.C.B.
(SOLDER SIDE)
P FM FRONT END(Z120) P.C.B.
CN309
CN304
CN303
CN302
H501(W501)
H601 (W601)
H603 (W603)
CP601
CP603
CP602
CN600
H602 (W602)
I FL P.C.B.
H OPERATION (2) P.C.B.
G OPERATION (1) P.C.B.
CP600
H600 (W600)


No CD playback
Dose the test disc rotate?
NO
YES
Remove the test disc
Check if TOC reading is performed
NO
YES
Dose "▷"appear on the display?
NO access
Playing time appear on the display
Are there outputs at pins ① and ② of IC702?
NG
①BCLK
②LRCK
3.2V
0V
1V 0.1μsec /Div.
F=44.1kHz
OK
Are there outputs at pins ⑬ and ⑮ of IC702?
OK
"H"
Is pin ⑯ of IC702 at "HIGH" or "LOW"?
"L"
NO
IC702 failure
Check the unit
IC702 failure
Check output at of TJ701 (RF)
Below 700mV or no output
At about 1 Vp-p
Is pin ⑯ of IC702 at "HIGH" or "LOW"? (CLVS)
"L"
"H"
Is there an output at pin ㉗ of IC702? (TRD)
NG
OK
IC702 failure
Is there an output at pin ㉔ of IC703? (IN3)
NG
OK
R727 or R749 failure
Measure voltage between ⑩ and ⑪ of IC703 is 3.5V?
NG
OK
IC703 failure
Traverse motor failure
Does optical pickup move?
NO
Optical pickup moves toward inner track once, and then toward outer track slightly (2 or 3 mm)
Does lens make vertical movements?
NO
YES
Does laser diode come on?
NO
YES
Measure voltage across R701
Above 0.8V
Below 0.8V
Load the test disc
Remains at "H"
Check pin ⑮ of IC701 (/RFDET)
Changes from "H" to "L"
Check pin ⑪ of IC702 (/FLOCK)
Remains at "H"
Changes from "H" to "L"
Is there an output at pin ㉔ of IC702? (ECM)
Remain at 2.5V (High impedance)
Changes from 2.5V to "L" (High impedance)
IC703 failure
OK
No waveform or upper and lower amplitudes are not equal
Check pin ㉔ of IC701 (FEOUT)
Upper and lower amplitudes of waveform are equal
IC701 failure
Without 2.5 V ±1.25 V limit
Is there an output at pin ㉚ of IC702? (FBAL)
Within 2.5 V ±1.25 V limit
IC702 failure
Optical pickup failure

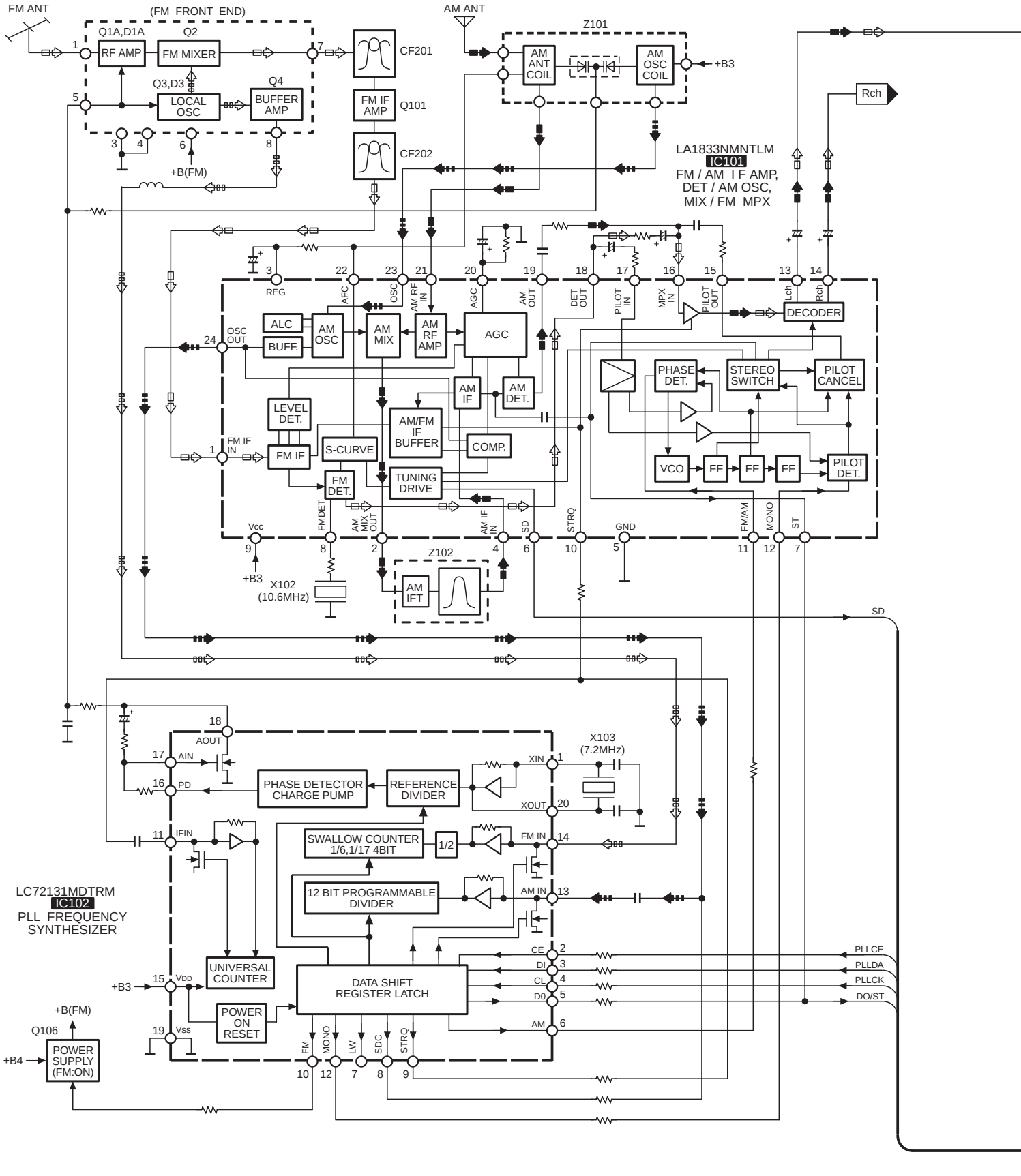

Check the position of optical pickup
At outer or around middle track
At inner track
Is pin ① of CN702 at "HIGH" or "LOW"?
"H"
"L"
Is pin ① of CN702 at "HIGH" or "LOW"?
"L"(0 V)
"H"
S701 is defective or disconnected
S701 is short-circuited
Are there outputs at pins ㉓ and ㉔ of IC703?
NG
OK
Optical pickup failure
Measure voltage across R701
Below 0.4 V
Above 0.4 V
Optical pickup failure
Is there an output at pin ㉘ of IC702? (FOD)
NG
OK
IC702 failure
IC703 failure
Measure voltage between Ⓑ and Ⓔ of Q701
Above 0.6 V
Below 0.6 V
Q701 or Optical pickup is defective
IC701 failure
Are there outputs at pins ⑮ and ⑯ of IC703?
NG
OK
Traverse deck failure
Is there an output at pin ㉒ of IC702? (TVD)
NG
OK
IC702 failure
IC703 failure
IC702 failure

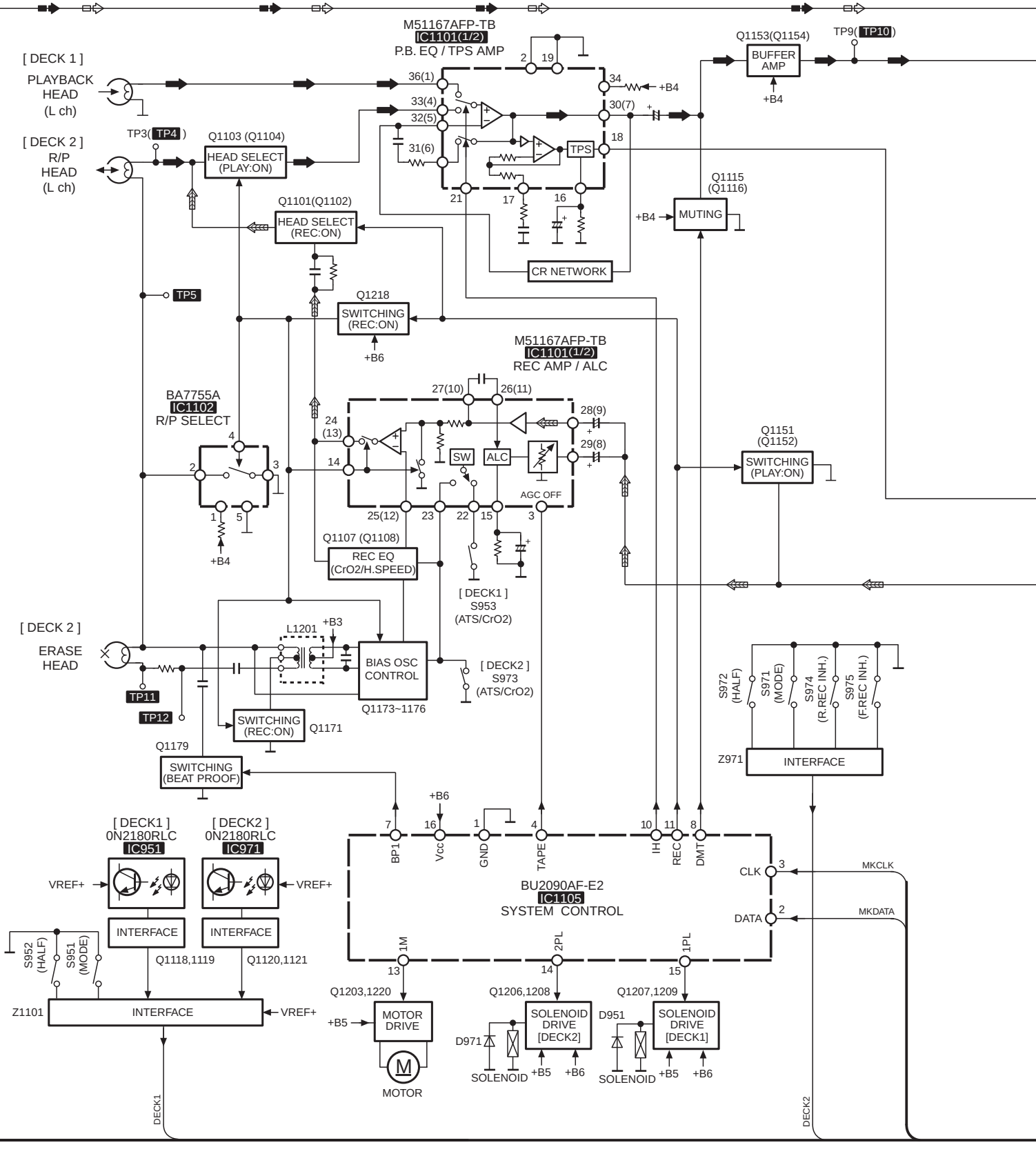
● CD CHANGER SECTION

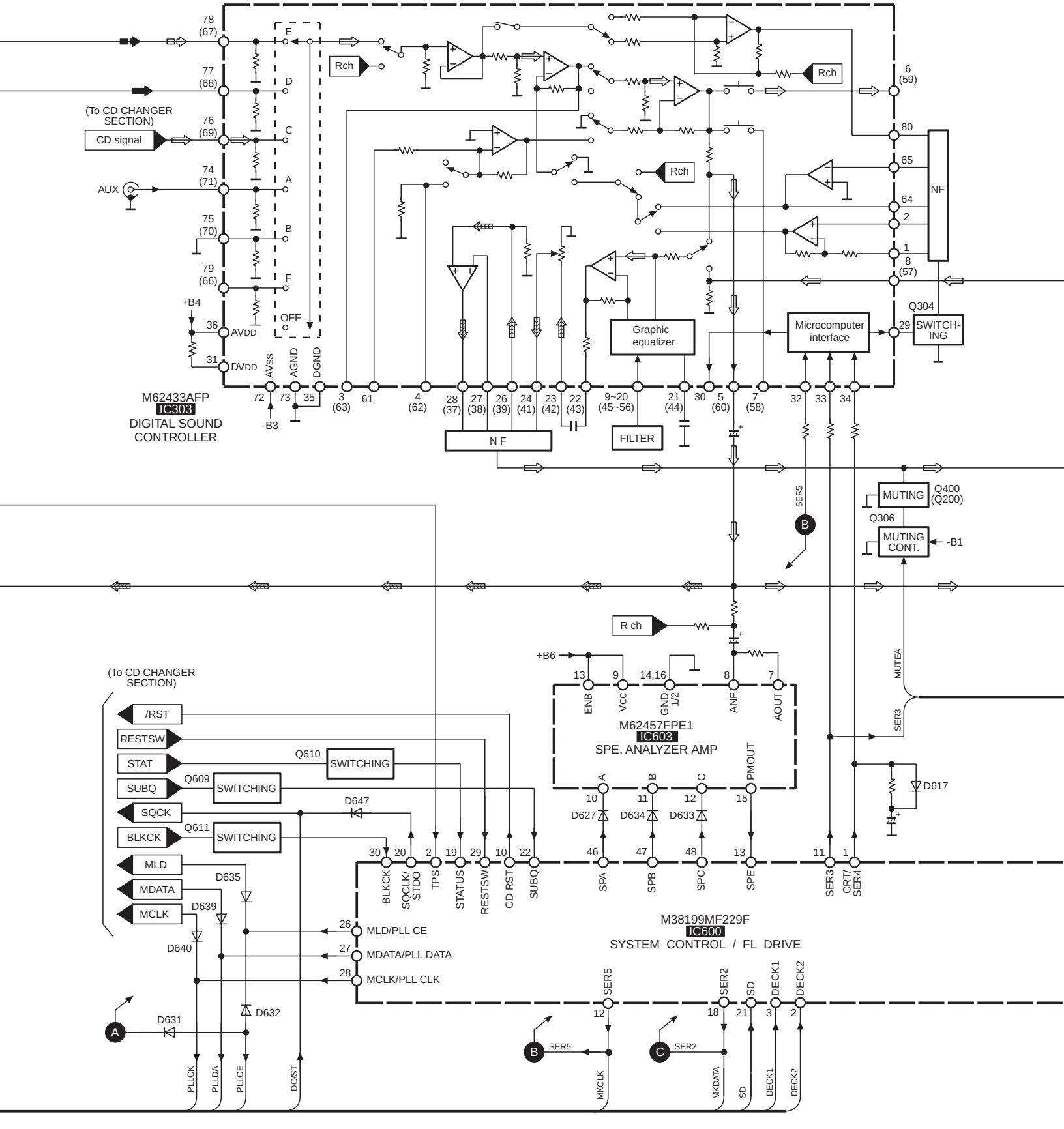


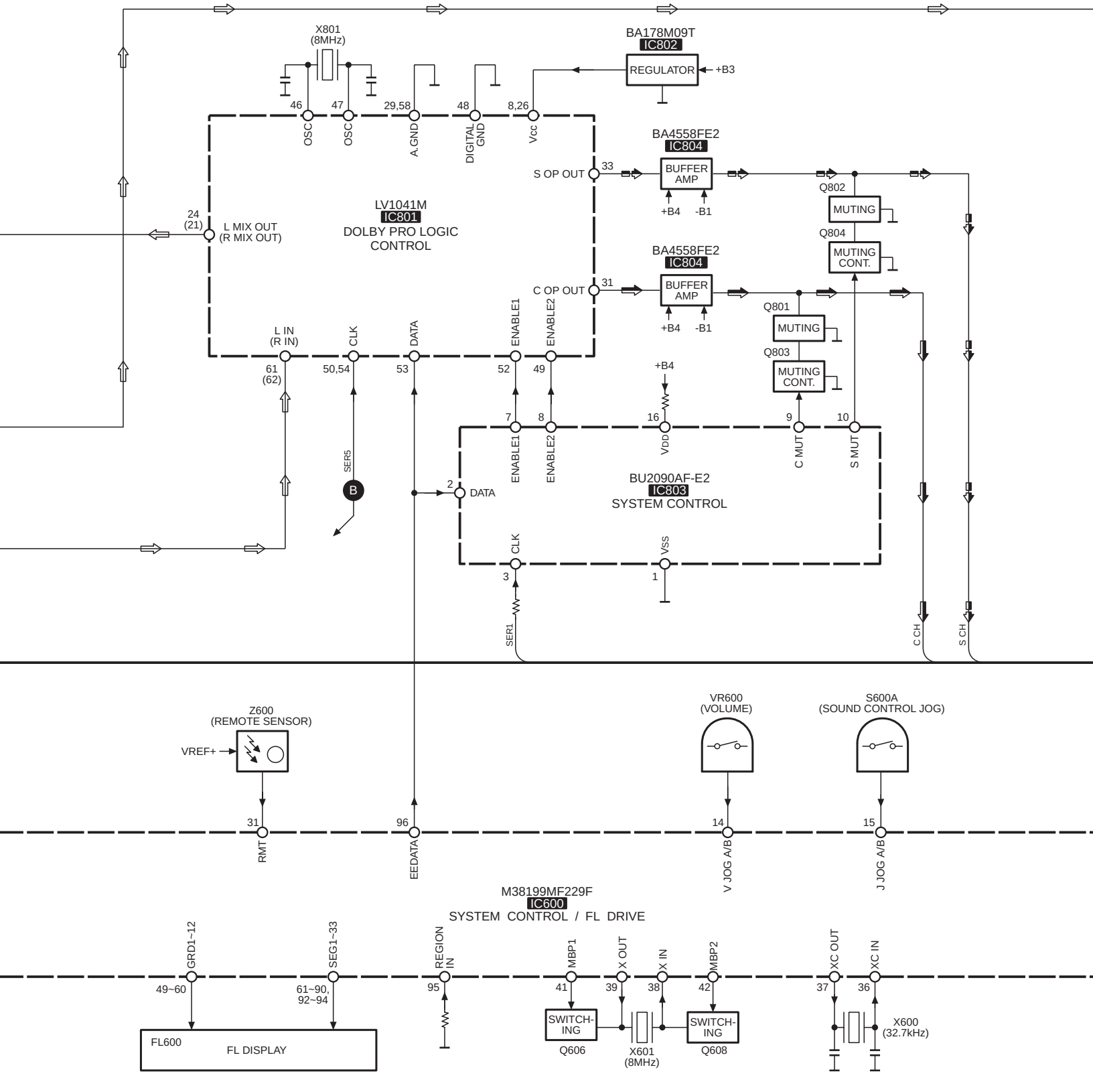

NOTE ● ⇨ : CD SIGNAL LINE
MLD
MCLK
MDATA
STAT
SUBQ
SQCK
BLKCK
RESTSW
(To MAIN SECTION)
S701
(REST)
MN662790RSC
IC702
SERVO PROCESSOR / DIGITAL SIGNAL PROCESSOR
DIGITAL FILTER / D/A CONVERTER
+B2
PSEL
MSEL
SSEL
DVDD1
AVDD2
AVDD1
VDD
VCC5V
/TEST
DVSS1
AVSS1
AVSS2
VSS
IOSEL
BLKCK
/CLDCK
SBCK
SUBC
DEMPH
SSEL
SQCK
SUBQ
PCK
PLLF
EFM
PLLF2
DSLF
DRF
ARF
RSEL
PSEL
MLD
MCLK
MDATA
IREF
STAT
MSEL
VCOF2
VCOF
BYTCK
CD-TEXT BUFFER
SUBCODE BUFFER
EFM DEMODULATION/ SYNC INTERPOLATION SUBCODE DEMODULATION
DSL / PLL VCO
DIGITAL DEEMPHASIS
8 TIMES OVERSAMPLING/ DIGITAL FILTER
1 BIT DAC PWM LOGIC
PWM (R)
PWM (L)
OUTR
OUTL
R ch
CD signal
16k SRAM
CIRC ERROR CORRECTION/ DEINTERLEAVE
DIGITAL AUDIO INTERFACE
DIGITAL AUDIO INTERFACE
INTERPORATION/ SOFT MUTING/ DIGITAL ATTENUATION
FLAG
IPFLAG
TX
ECM
ECS
PC
LRCK
SRDATA
BCLK
DMUTE
DSLF2
KICK
TRV
VREF
TVD
TRD
FOD
TBAL
FBAL
/TLOCK
/FLOCK
D/A CONVERTER
OUTPUT PORT
MICRO COMPUTER INTERFACE
SERVO CPU
VCO
TIMING GENERATOR PITCH CONTROL
A/D CONVERTER
INPUT PORT
SERVO TIMING GENERATOR
SMCK
FCLK
CSEL
X2
X1
FE
TE
RFENV
TRCRS
VDET
BDO
/RFDET
OFT
SENSE
WVEL
LDON
/RST
X701
(16.9344MHZ)
(To MAIN SECTION)
/RST

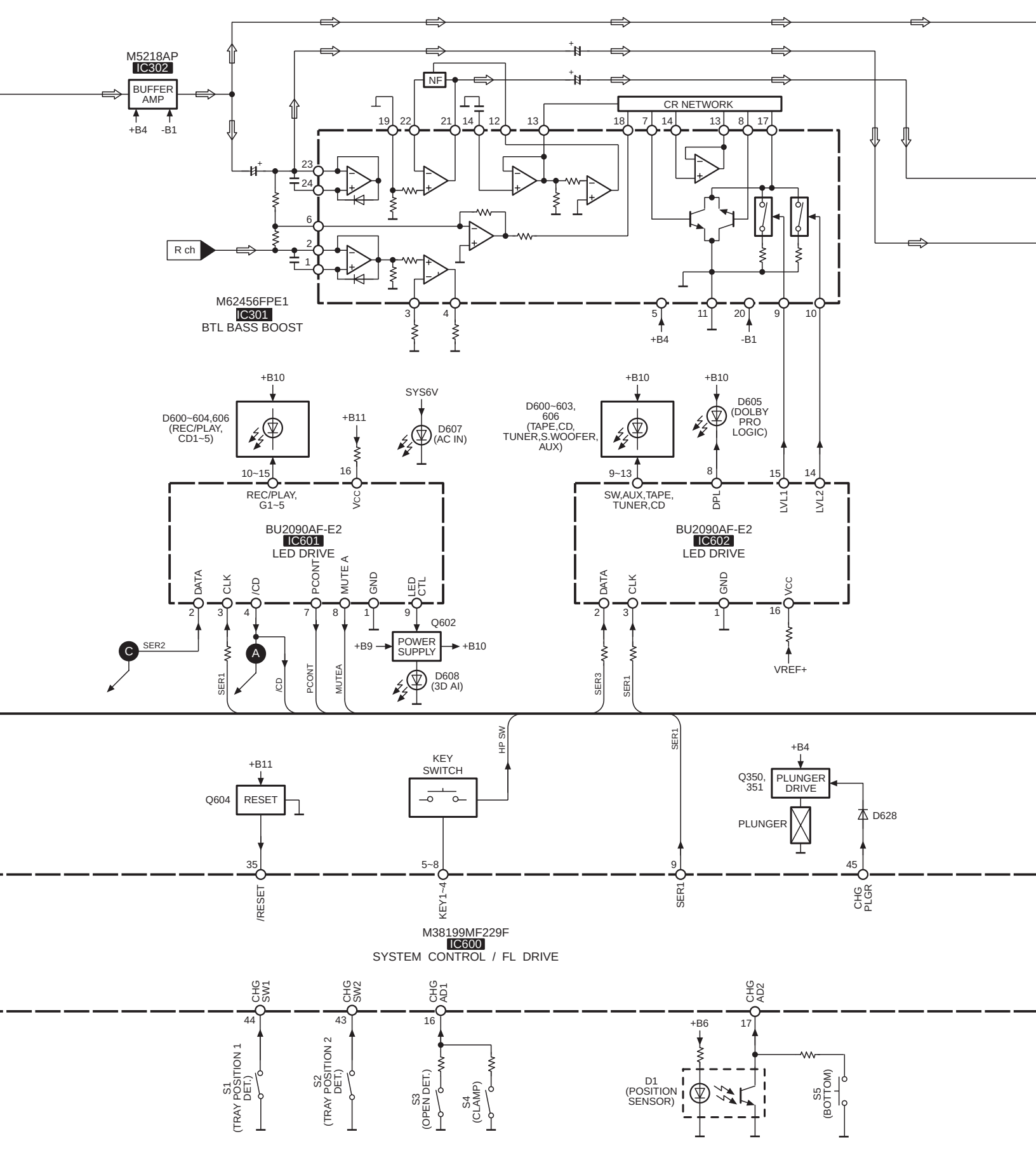
● MAIN SECTION

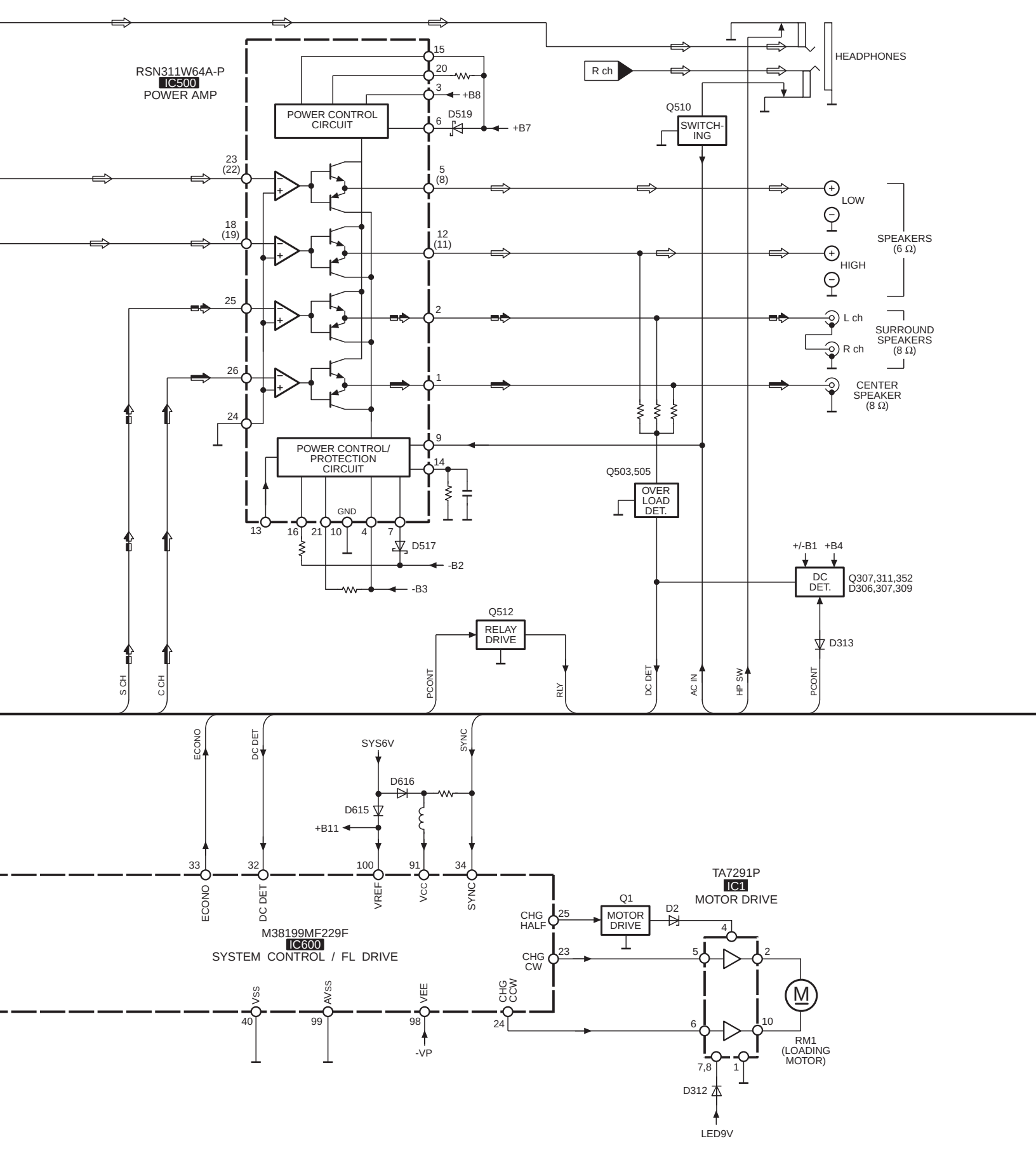


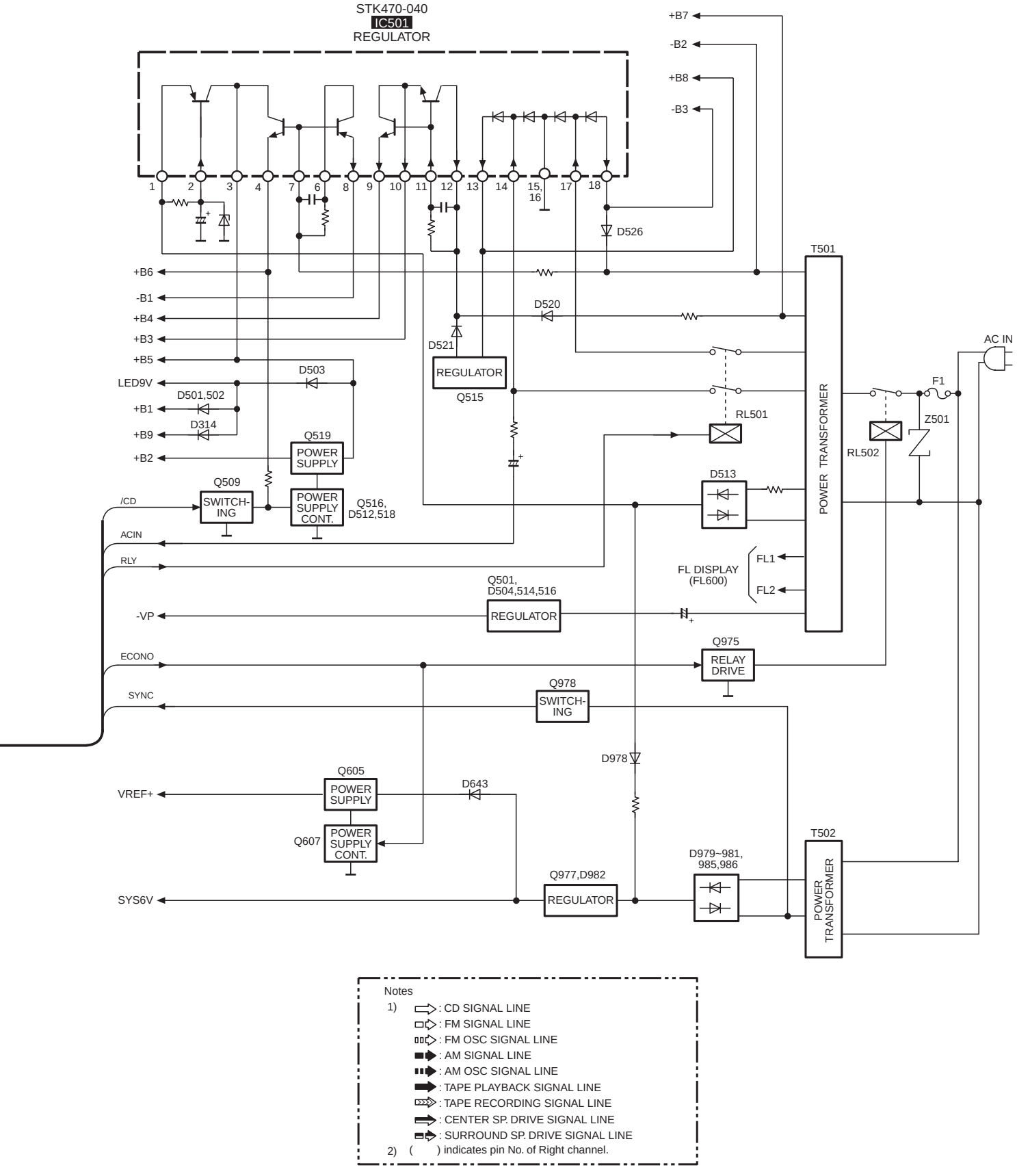

[DECK 1]
PLAYBACK HEAD (L ch)
[DECK 2]
R/P HEAD (L ch)
TP3(TP4)
Q1103 (Q1104)
HEAD SELECT (PLAY:ON)
Q1101(Q1102)
HEAD SELECT (REC:ON)
M51167AFP-TB
IC1101(1/2)
P.B. EQ / TPS AMP
TPS
CR NETWORK
Q1153(Q1154)
BUFFER AMP
TP9(TP10)
+B4
Q1115 (Q1116)
MUTING
TP5
Q1218
SWITCHING (REC:ON)
+B6
M51167AFP-TB
IC1101(1/2)
REC AMP / ALC
BA7755A
IC1102
R/P SELECT
SW
ALC
AGC OFF
Q1151 (Q1152)
SWITCHING (PLAY:ON)
Q1107 (Q1108)
REC EQ (CrO2/H.SPEED)
[DECK1]
S953
(ATS/CrO2)
[DECK 2]
ERASE HEAD
L1201
+B3
BIAS OSC CONTROL
Q1173~1176
[DECK2]
S973
(ATS/CrO2)
TP11
TP12
SWITCHING (REC:ON)
Q1171
Q1179
SWITCHING (BEAT PROOF)
S972 (HALF)
S971 (MODE)
S974 (R.REC INH.)
S975 (F.REC INH.)
Z971
INTERFACE
[DECK1]
0N2180RLC
IC951
[DECK2]
0N2180RLC
IC971
VREF+
INTERFACE
S952 (HALF)
S951 (MODE)
Q1118,1119
Q1120,1121
Z1101
BU2090AF-E2
IC1105
SYSTEM CONTROL
BP1
Vcc
GND
TAPE
IH
REC
DMT
CLK
DATA
MKCLK
MKDATA
1M
2PL
1PL
Q1203,1220
MOTOR DRIVE
MOTOR
Q1206,1208
SOLENOID DRIVE [DECK2]
Q1207,1209
SOLENOID DRIVE [DECK1]
D971
D951
SOLENOID
+B5
+B6
DECK1
DECK2


M62433AFP
IC303
DIGITAL SOUND CONTROLLER
(To CD CHANGER SECTION)
CD signal
AUX
Rch
Graphic equalizer
Microcomputer interface
SWITCH-ING
Q304
NF
N F
FILTER
MUTING
Q400 (Q200)
Q306
MUTING CONT.
-B1
-B3
+B4
+B6
R ch
M62457FPE1
IC603
SPE. ANALYZER AMP
ENB
VCC
GND
ANF
AOUT
PMOUT
D627
D634
D633
D617
MUTEA
SER3
SER5
(To CD CHANGER SECTION)
/RST
RESTSW
STAT
SUBQ
SQCK
BLKCK
MLD
MDATA
MCLK
Q610
Q609
Q611
SWITCHING
D647
D635
D639
D640
D631
D632
M38199MF229F
IC600
SYSTEM CONTROL / FL DRIVE
MLD/PLL CE
MDATA/PLL DATA
MCLK/PLL CLK
BLKCK
SQCLK/ STDO
TPS
STATUS
RESTSW
CD RST
SUBQ
SPA
SPB
SPC
SPE
SER3
CRT/ SER4
SER2
SD
DECK1
DECK2
PLLCK
PLLDA
PLLCE
DO/ST
MKCLK
MKDATA
OFF
AVDD
DVDD
AVSS
AGND
DGND


X801
(8MHz)
BA178M09T
IC802
REGULATOR
+B3
46
47
29,58
48
8,26
OSC
OSC
A.GND
DIGITAL GND
Vcc
BA4558FE2
IC804
S OP OUT
33
BUFFER AMP
+B4
-B1
Q802
MUTING
Q804
MUTING CONT.
24
(21)
L MIX OUT
(R MIX OUT)
LV1041M
IC801
DOLBY PRO LOGIC CONTROL
BA4558FE2
IC804
C OP OUT
31
BUFFER AMP
+B4
-B1
Q801
MUTING
Q803
MUTING CONT.
L IN
(R IN)
CLK
DATA
ENABLE1
ENABLE2
61
(62)
50,54
53
52
49
+B4
7
8
16
9
10
ENABLE1
ENABLE2
VDD
C MUT
S MUT
SER5
B
2
DATA
BU2090AF-E2
IC803
SYSTEM CONTROL
CLK
VSS
3
1
SER1
C CH
S CH
Z600
(REMOTE SENSOR)
VREF+
VR600
(VOLUME)
S600A
(SOUND CONTROL JOG)
31
96
14
15
RMT
EEDATA
V JOG A/B
J JOG A/B
M38199MF229F
IC600
SYSTEM CONTROL / FL DRIVE
GRD1~12
SEG1~33
REGION IN
MBP1
X OUT
X IN
MBP2
XC OUT
XC IN
49~60
61~90,
92~94
95
41
39
38
42
37
36
SWITCH-ING
SWITCH-ING
Q606
Q608
X601
(8MHz)
X600
(32.7kHz)
FL600
FL DISPLAY

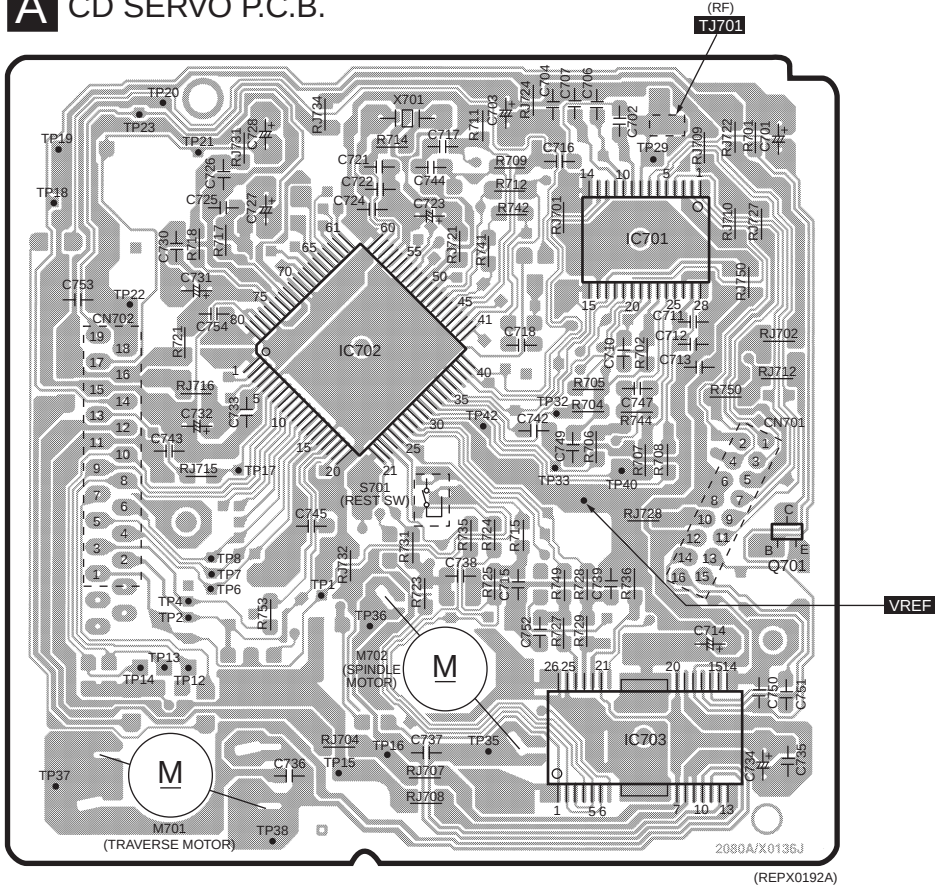

M5218AP
IC302
BUFFER AMP
+B4
-B1
NF
CR NETWORK
R ch
M62456FPE1
IC301
BTL BASS BOOST
+B10
D600~604,606
(REC/PLAY, CD1~5)
+B11
SYS6V
D607
(AC IN)
REC/PLAY, G1~5
VCC
BU2090AF-E2
IC601
LED DRIVE
DATA
CLK
/CD
PCONT
MUTE A
GND
LED CTL
SER2
SER1
/CD
PCONT
MUTEA
Q602
POWER SUPPLY
+B9
+B10
D608
(3D AI)
D600~603, 606
(TAPE,CD, TUNER,S.WOOFER, AUX)
D605
(DOLBY PRO LOGIC)
SW,AUX,TAPE, TUNER,CD
DPL
LVL1
LVL2
BU2090AF-E2
IC602
LED DRIVE
SER3
SER1
VREF+
KEY SWITCH
HP SW
Q604
RESET
/RESET
KEY1~4
SER1
Q350, 351
PLUNGER DRIVE
PLUNGER
D628
CHG PLGR
M38199MF229F
IC600
SYSTEM CONTROL / FL DRIVE
CHG SW1
CHG SW2
CHG AD1
CHG AD2
S1 (TRAY POSITION 1 DET.)
S2 (TRAY POSITION 2 DET.)
S3 (OPEN DET.)
S4 (CLAMP)
+B6
D1 (POSITION SENSOR)
S5 (BOTTOM)


RSN311W64A-P
IC500
POWER AMP
POWER CONTROL CIRCUIT
POWER CONTROL/ PROTECTION CIRCUIT
15
20
3
+B8
6
D519
+B7
23 (22)
18 (19)
25
26
24
5 (8)
12 (11)
2
1
9
14
13
16
21
10
GND
4
7
D517
-B2
-B3
R ch
HEADPHONES
Q510
SWITCH-ING
LOW
HIGH
SPEAKERS (6 Ω)
L ch
R ch
SURROUND SPEAKERS (8 Ω)
CENTER SPEAKER (8 Ω)
Q503,505
OVER LOAD DET.
+/-B1
+B4
DC DET.
Q307,311,352
D306,307,309
D313
Q512
RELAY DRIVE
S CH
C CH
PCONT
RLY
DC DET
AC IN
HP SW
PCONT
ECONO
DC DET
SYS6V
SYNC
D616
D615
+B11
33
32
100
91
34
ECONO
DC DET
VREF
VCC
SYNC
M38199MF229F
IC600
SYSTEM CONTROL / FL DRIVE
VSS
AVSS
VEE
CHG CCW
40
99
98
24
-VP
TA7291P
IC1
MOTOR DRIVE
Q1
MOTOR DRIVE
D2
CHG HALF
CHG CW
25
23
4
5
2
6
10
7,8
1
M
RM1
(LOADING MOTOR)
D312
LED9V


STK470-040
IC501
REGULATOR
+B7
-B2
+B8
-B3
1
2
3
4
7
6
8
9
10
11
12
13
14
15,
16
17
18
D526
T501
+B6
-B1
+B4
+B3
+B5
LED9V
+B1
+B9
+B2
D503
D501,502
D314
D520
D521
REGULATOR
Q515
RL501
AC IN
F1
Z501
RL502
POWER TRANSFORMER
Q519
POWER SUPPLY
Q509
SWITCH-ING
POWER SUPPLY CONT.
Q516, D512,518
D513
/CD
ACIN
RLY
FL DISPLAY (FL600)
FL1
FL2
Q501, D504,514,516
REGULATOR
-VP
Q975
RELAY DRIVE
ECONO
Q978
SWITCH-ING
SYNC
D978
Q605
POWER SUPPLY
D643
VREF+
Q607
POWER SUPPLY CONT.
T502
D979~981, 985,986
Q977,D982
REGULATOR
SYS6V
POWER TRANSFORMER
Notes
1) : CD SIGNAL LINE
: FM SIGNAL LINE
: FM OSC SIGNAL LINE
: AM SIGNAL LINE
: AM OSC SIGNAL LINE
: TAPE PLAYBACK SIGNAL LINE
: TAPE RECORDING SIGNAL LINE
: CENTER SP. DRIVE SIGNAL LINE
: SURROUND SP. DRIVE SIGNAL LINE
2) ( ) indicates pin No. of Right channel.

Notes: • This printed circuit board diagram may be modified at any time with the development of new technology.
• ⁎L10~12 are printed coils formed on the P.C.B. and thus not found in the replacement parts list.

A CD SERVO P.C.B.

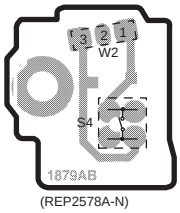


(REPX0192A)

■ ELECTRICAL PARTS LOCATION

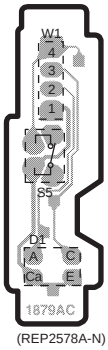
Ref. No.	Lo. No.	Ref. No.	Lo. No.
A CD SERVO P.C.B.			
IC701	2D	RJ722	2D
IC702	3B	RJ724	2C
IC703	5D	RJ727	2D
Q701	4D	RJ728	4D
X701	2C	RJ731	2B
S701	4C	RJ732	4B
CN701	4D	RJ734	2B
CN702	3A	RJ750	3D
M701	5B	C701	2D
M702	4C	C702	2D
TJ701	2D	C703	2C
R701	2D	C704	2C
R702	3D	C706	2C
R704	3C	C707	2C
R705	3C	C710	3D
R706	3C	C711	3D
R707	3D	C712	3D
R708	3D	C713	3D
R709	2C	C714	4D
R711	2C	C715	4C
R712	2C	C716	2C
R714	2C	C717	2C
R715	4C	C718	3C
R717	2B	C721	2C
R718	2B	C722	2C
R721	3B	C723	2C
R723	4C	C724	2B
R724	4C	C725	2B
R725	4C	C726	2B
R727	4C	C727	2B
R728	4C	C728	2B
R729	4C	C730	2B
R731	4C	C731	3B
R735	4C	C732	3B
R736	4D	C733	3B
R741	2C	C734	5D
R742	2C	C735	5D
R744	3D	C736	5B
R749	4C	C737	5C
R750	3D	C738	4C
R753	4B	C739	4D
RJ701	2C	C742	3C
RJ702	3D	C743	3B
RJ704	5B	C744	2C
RJ707	5C	C745	4B
RJ708	5C	C747	3D
RJ709	2D	C749	3C
RJ710	2D	C750	4D
RJ712	3D	C751	4D
RJ715	3B	C752	4C
RJ716	3B	C753	3A
RJ721	2C	C754	3B
K CLAMP P.C.B.			
S4	7B	W2	7B
L BOTTOM SW P.C.B.			
D1	8D	W1	7D
S5	7D		

K CLAMP SW P.C.B.



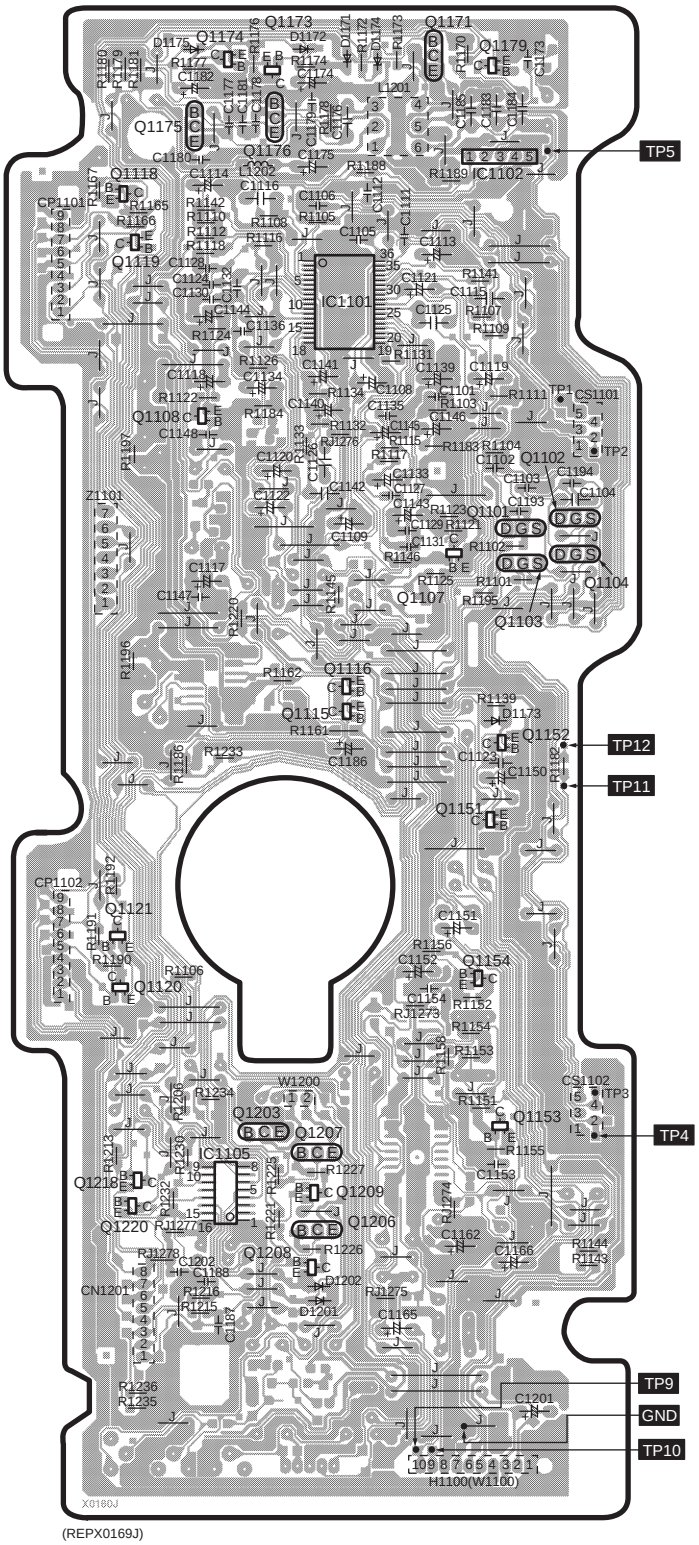
(REP2578A-N)

L BOTTOM SW P.C.B.



(REP2578A-N)

C MECHANISM CONTROL P.C.B.

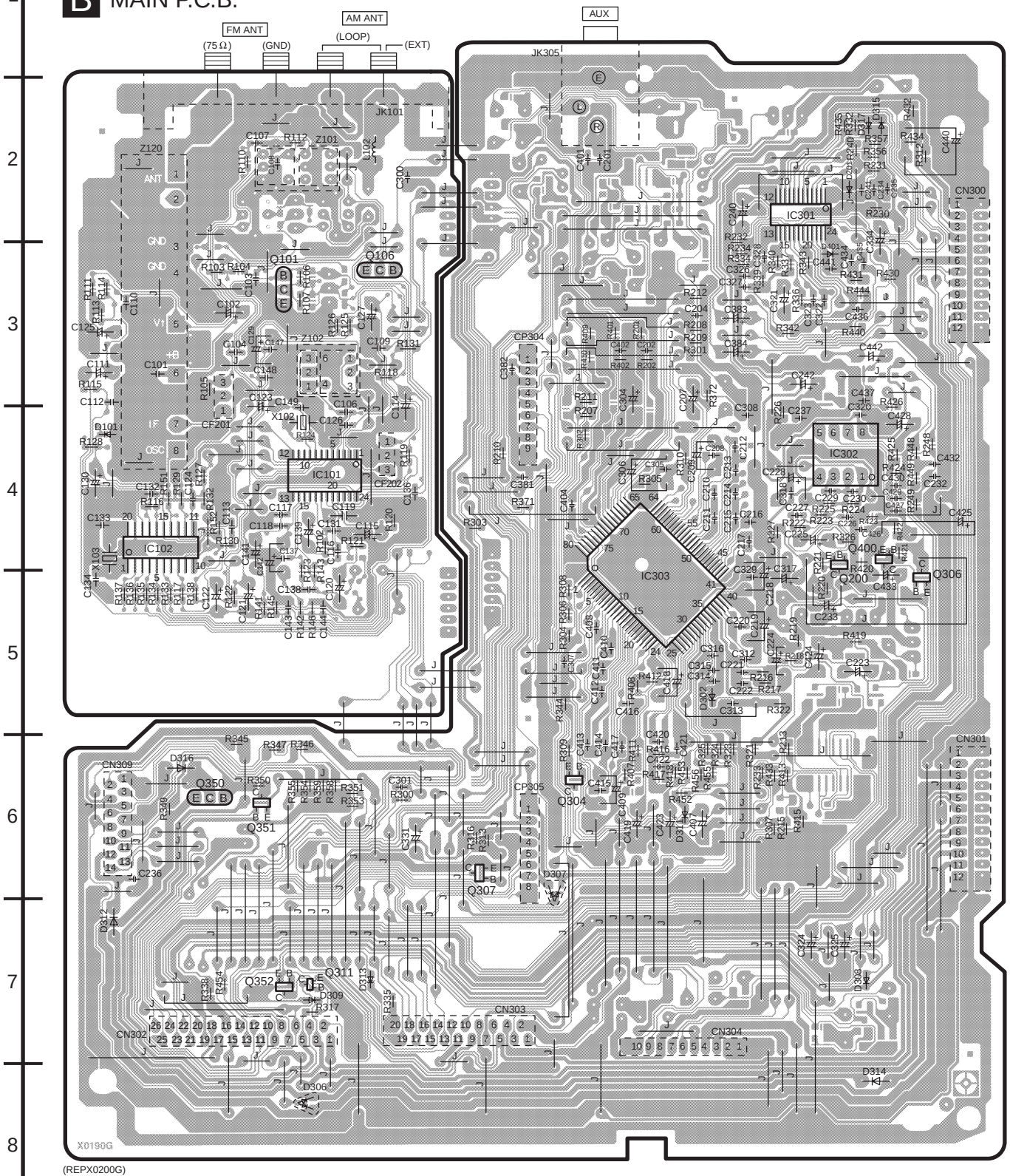


(REPX0169J)

■ ELECTRICAL PARTS LOCATION

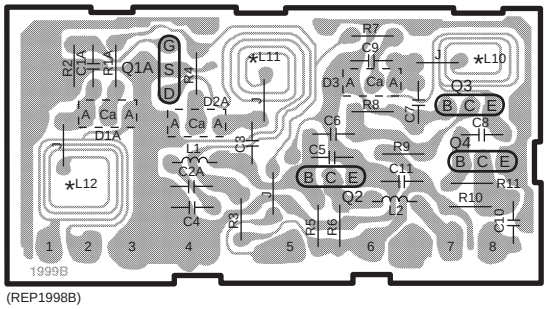
Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.
C MECHANISM CONTROL P.C.B.					
IC1101	3B	R1126	3B	C1104	4D
IC1102	2C	R1131	3C	C1105	2C
IC1105	7B	R1132	3B	C1106	2B
Q1101	4C	R1133	3B	C1108	3C
Q1102	4D	R1134	3B	C1109	4C
Q1103	4C	R1139	4C	C1111	2C
Q1104	4D	R1141	3C	C1112	2C
Q1107	4C	R1142	2B	C1113	2C
Q1108	3B	R1143	7D	C1114	2B
Q1115	5C	R1144	7D	C1115	3C
Q1116	4C	R1145	4B	C1116	2B
Q1118	2B	R1146	4C	C1117	4B
Q1119	2B	R1151	6C	C1118	3B
Q1120	6A	R1152	6C	C1119	3C
Q1121	6A	R1153	6C	C1120	3B
Q1151	5C	R1154	6C	C1121	3C
Q1152	5C	R1155	6C	C1122	4B
Q1153	6C	R1156	6C	C1123	5C
Q1154	6C	R1158	6C	C1124	3B
Q1171	2C	R1161	5B	C1125	3C
Q1173	2B	R1162	4B	C1126	3B
Q1174	2B	R1165	2B	C1127	4C
Q1175	2B	R1166	2B	C1128	3B
Q1176	2B	R1167	2A	C1129	4C
Q1179	2C	R1170	2C	C1130	3B
Q1203	6B	R1172	2C	C1131	4C
Q1206	7B	R1173	2C	C1132	3B
Q1207	6B	R1174	2B	C1133	3C
Q1208	7B	R1176	2B	C1134	3B
Q1209	7B	R1177	2B	C1135	3C
Q1218	7B	R1178	2B	C1136	3B
Q1220	7B	R1179	2B	C1139	3C
D1171	2C	R1180	2A	C1140	3B
D1172	2B	R1181	2B	C1141	3B
D1173	5C	R1182	5C	C1142	4B
D1174	2C	R1183	3C	C1143	4C
D1175	2B	R1184	3B	C1144	3B
D1201	7B	R1186	5B	C1145	3C
D1202	7B	R1188	2C	C1146	3C
L1201	2C	R1189	2C	C1147	4B
L1202	2B	R1190	6A	C1148	3B
Z1101	4A	R1191	6A	C1150	5C
CN1201	7B	R1192	5A	C1151	5C
CP1101	2A	R1195	4C	C1152	6C
CP1102	5A	R1196	4B	C1153	7C
CS1101	3D	R1197	3B	C1154	6C
CS1102	6D	R1206	6B	C1162	7C
H1100(W1100)	8C	R1213	7A	C1165	7C
W1200	6B	R1215	7B	C1166	7C
R1101	4C	R1216	7B	C1173	2C
R1102	4C	R1220	4B	C1174	2B
R1103	3C	R1221	7B	C1175	2B
R1104	3C	R1225	7B	C1176	2C
R1105	2B	R1226	7B	C1177	2B
R1106	6B	R1227	7B	C1178	2B
R1107	3C	R1230	7B	C1179	2B
R1108	2B	R1232	7B	C1180	2B
R1109	3C	R1233	5B	C1181	2B
R1110	2B	R1234	6B	C1182	2B
R1111	3C	R1235	8B	C1183	2C
R1112	2B	R1236	8B	C1184	2C
R1115	3C	RJ1273	6C	C1185	2C
R1116	2B	RJ1274	7C	C1186	5C
R1117	3C	RJ1275	7C	C1187	7B
R1118	2B	RJ1276	3B	C1188	7B
R1121	4C	RJ1277	7B	C1193	4C
R1122	3B	RJ1278	7B	C1194	3D
R1123	4C	C1101	3C	C1201	8C
R1124	3B	C1102	3C	C1202	7B
R1125	4C	C1103	3C		

B MAIN P.C.B.



(REPX0200G)

P FM FRONT END P.C.B.

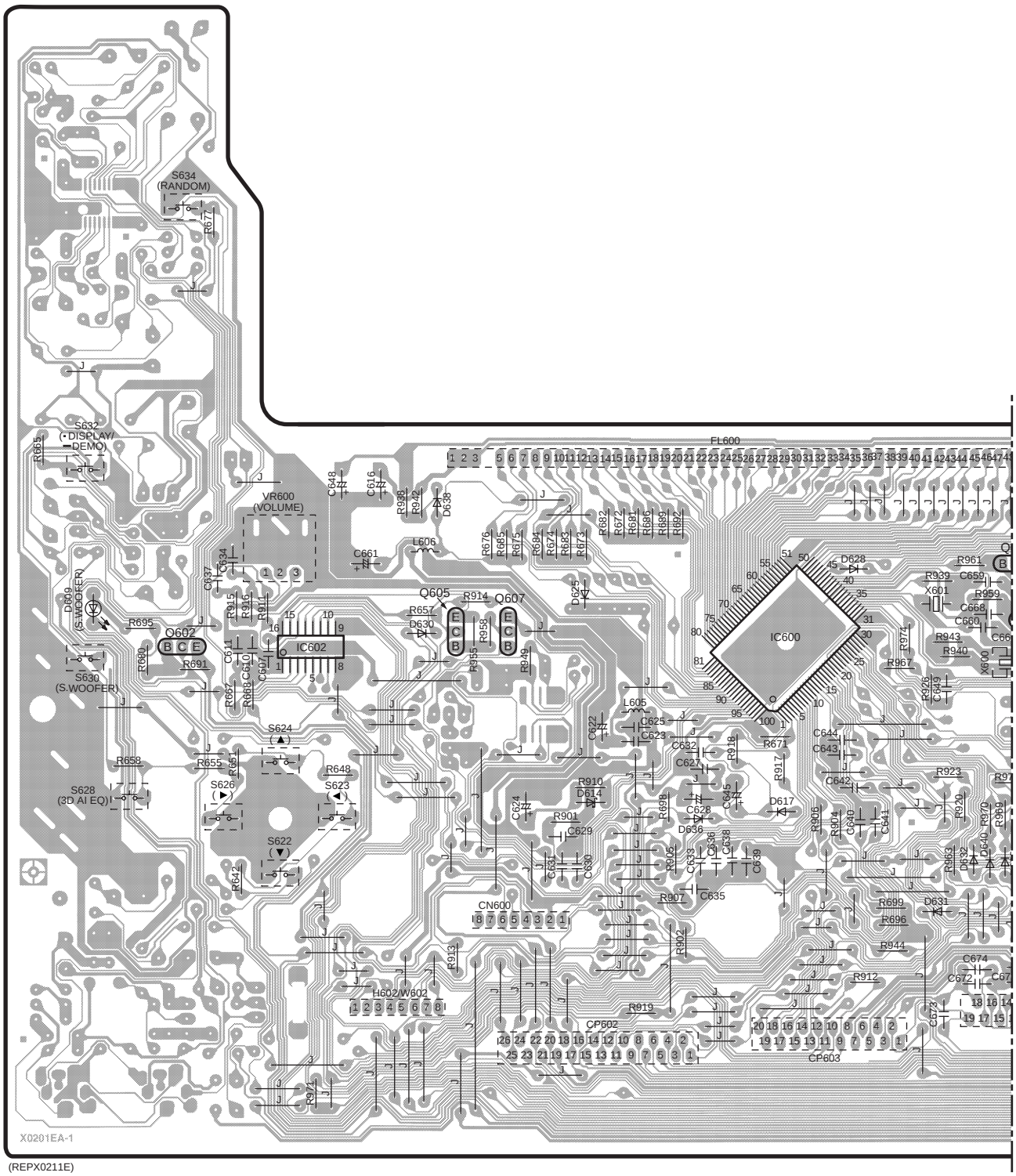


(REP1998B)

■ ELECTRICAL PARTS LOCATION

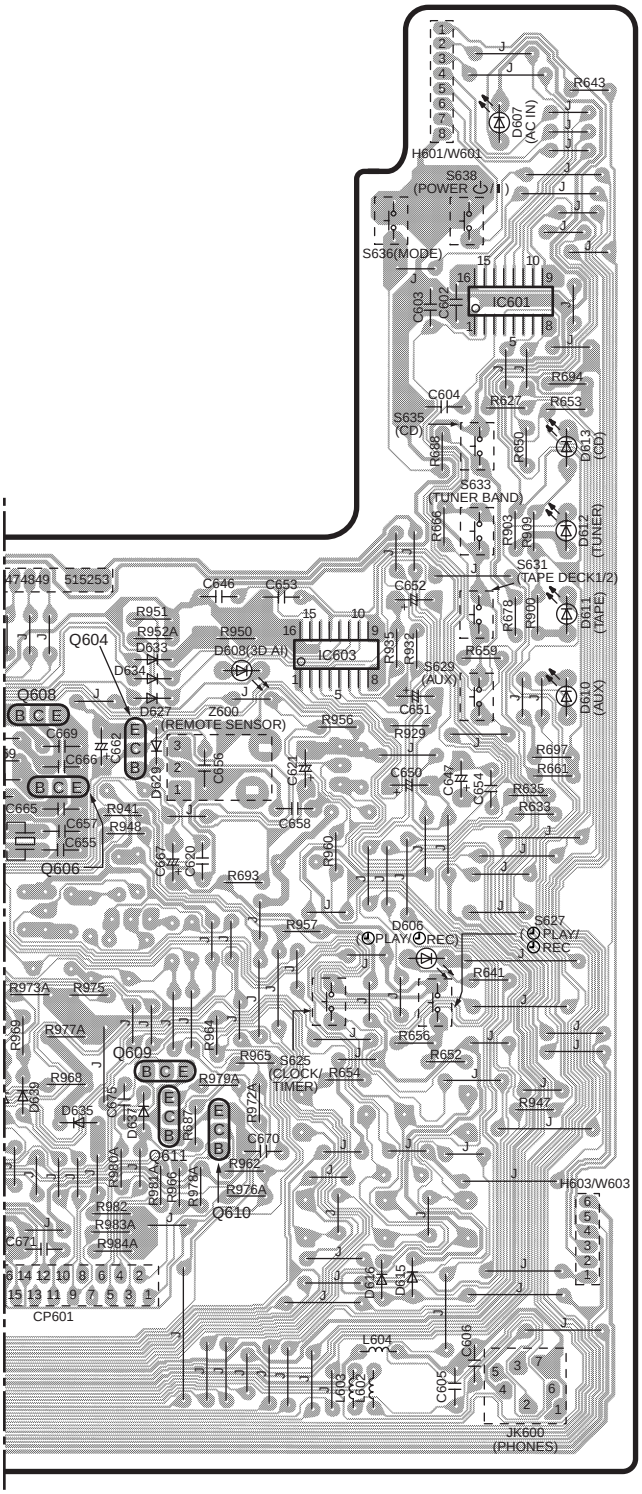
Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.
B MAIN P.C.B.															
IC101	4B	CN309	6A	R146	5B	R313	6C	R413	6E	C118	4B	C221	5E	C334	2F
IC102	4A	CP304	3D	R151	4A	R316	6C	R415	6E	C119	4B	C222	5E	C381	4D
IC301	2E	CP305	6D	R152	4B	R317	7B	R416	6D	C120	5B	C223	5F	C382	3C
IC302	4F	JK101	2B	R201	3D	R321	6E	R417	6D	C121	5B	C224	5E	C383	3E
IC303	5D	JK305	1D	R202	3D	R322	5E	R418	6D	C122	5B	C225	4E	C384	3E
Q101	3B	R102	4B	R207	4D	R323	6E	R419	5F	C123	3B	C226	4F	C401	2D
Q106	3C	R103	3B	R208	3E	R324	6E	R420	4F	C124	4B	C227	4E	C402	3D
Q200	4E	R104	3B	R209	3E	R325	6E	R421	4F	C125	3A	C228	4E	C404	4D
Q304	6D	R105	3B	R210	4C	R326	4F	R422	4F	C126	4B	C229	4E	C407	6E
Q306	5F	R106	3B	R211	3D	R327	4E	R423	4F	C127	3C	C230	4F	C408	5D
Q307	6C	R107	3B	R212	3E	R332	2F	R424	4F	C129	3B	C232	4F	C409	6D
Q311	7B	R110	2B	R213	6E	R334	3E	R425	4F	C130	4A	C233	5E	C410	5D
Q350	6B	R111	3A	R215	6E	R335	7C	R426	4F	C131	4B	C234	2F	C411	5D
Q351	6B	R112	2B	R216	5E	R336	3E	R430	3F	C132	4A	C235	2F	C412	5D
Q352	7B	R113	3A	R217	5E	R337	3E	R431	3F	C133	4A	C236	6A	C413	6D
Q400	4F	R114	3A	R218	5E	R338	7B	R432	2F	C134	5A	C237	4E	C414	6D
D101	4A	R115	3A	R219	5E	R339	3E	R433	6E	C136	4C	C240	2E	C415	6D
D201	2F	R116	4A	R220	5E	R340	3E	R434	2F	C137	4B	C241	2F	C416	5D
D302	5E	R117	5A	R221	4E	R342	3E	R435	2F	C138	5B	C242	3E	C417	6D
D306	8B	R118	3C	R222	4E	R343	3E	R440	3F	C139	4B	C300	2C	C418	5D
D307	6D	R119	4C	R223	4E	R344	5D	R444	3F	C141	4B	C301	6C	C419	6D
D308	7F	R120	4C	R224	4F	R345	6B	R448	4F	C142	4B	C304	3D	C420	6D
D309	7B	R121	4C	R225	4E	R346	6B	R449	4F	C143	5B	C305	4D	C421	6D
D311	6E	R122	5B	R226	4E	R347	6B	R452	6E	C144	5B	C306	4D	C422	6D
D312	7A	R123	5B	R230	2F	R349	6A	R453	6E	C147	3B	C307	5D	C423	6D
D313	7C	R124	4B	R231	2F	R350	6B	R454	7B	C148	3B	C308	4E	C424	5E
D314	8F	R125	3B	R232	2E	R351	6C	R455	6E	C149	4B	C312	5E	C425	4F
D315	2F	R126	3B	R233	6E	R353	6C	R456	6E	C201	2D	C313	5E	C426	4F
D316	6A	R127	4B	R234	3E	R354	6B	C101	3A	C202	3D	C314	5E	C427	4F
D317	2F	R128	4A	R240	2F	R355	6B	C102	3B	C204	3E	C315	5E	C428	4F
D401	3E	R129	4A	R248	4F	R356	2F	C103	3B	C207	3E	C316	5E	C429	4F
L102	2C	R130	4B	R249	4F	R357	2F	C104	3B	C208	4E	C317	5E	C430	4F
Z101	2B	R131	3C	R300	6C	R358	6B	C106	4B	C209	4E	C318	4E	C432	4F
Z102	3B	R132	4B	R301	3E	R359	6B	C107	2B	C210	4E	C320	4F	C433	5F
Z120	3A	R133	5A	R302	4D	R371	4D	C108	2B	C211	4E	C321	3E	C434	3F
CF201	3B	R134	5A	R303	4C	R372	3E	C109	3C	C212	4E	C322	3E	C435	3F
CF202	4C	R135	5A	R304	5D	R401	3D	C110	3A	C213	4E	C323	3E	C436	3F
X102	4B	R136	5A	R305	4D	R402	3D	C111	3A	C214	4E	C324	7E	C437	3F
X103	4A	R137	5A	R306	5D	R407	6D	C112	3A	C215	4E	C325	7E	C440	2F
CN300	3F	R138	5B	R307	6E	R408	5D	C113	4B	C216	4E	C326	3E	C441	3E
CN301	6F	R141	5B	R308	5D	R409	3D	C114	3C	C217	4E	C327	3E	C442	3F
CN302	7A	R142	5B	R309	6D	R410	3D	C115	4C	C218	5E	C328	3E		
CN303	7C	R143	5B	R310	4E	R411	6D	C116	4B	C219	5E	C329	5E		
CN304	7E	R145	5B	R312	2F	R412	5D	C117	4B	C220	5E	C331	6C		
P FM FRONT END P.C.B.															
Q1A	2I	D2A	2I	* L11	2I	R4	2I	R9	2J	C3	2I	C8	2J		
Q2	2J	D3	2J	* L12	2I	R5	2J	R10	2J	C4	2I	C9	2J		
Q3	2J	L1	2I	R1A	2I	R6	2J	R11	2J	C5	2J	C10	2J		
Q4	2J	L2	2J	R2	2H	R7	1J	C1A	2I	C6	2J	C11	2J		
D1A	2I	* L10	2J	R3	2I	R8	2J	C2A	2I	C7	2J				

FL P.C.B.



(REPX0211E)

G H I J K L



■ ELECTRICAL PARTS LOCATION

Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.
I FL P.C.B.							
IC600	5E	S636	2H	R905	6E	C603	3H
IC601	3I	S638	2H	R906	6E	C604	3H
IC602	5B	CN600	6D	R907	6E	C605	7H
IC603	4H	CP601	7G	R909	4I	C606	7I
Q602	5B	CP602	7D	R910	6D	C607	5B
Q604	5G	CP603	7E	R911	5B	C610	5B
Q605	5C	JK600	7I	R912	7F	C611	5B
Q606	5G	H601/W601	2H	R913	7C	C616	4C
Q607	5D	H602/W602	7C	R914	5C	C620	5G
Q608	4G	H603/W603	7I	R915	5B	C621	5H
Q609	6G	R627	3I	R916	5B	C622	5D
Q610	6G	R633	5I	R917	6E	C623	5D
Q611	6G	R635	5I	R918	6E	C624	6D
D606	6H	R641	6I	R919	7D	C625	5D
D607	2I	R642	6B	R920	6F	C627	6E
D608	4G	R643	2I	R923	6F	C628	6E
D609	5A	R648	6C	R926	5F	C629	6D
D610	4I	R650	3I	R929	5H	C630	6D
D611	4I	R651	6B	R932	4H	C631	6D
D612	4I	R652	6H	R935	4H	C632	6E
D613	3I	R653	3I	R938	4C	C633	6E
D614	6D	R654	6H	R939	5F	C634	4B
D615	7H	R655	6B	R940	5F	C635	6E
D616	7H	R656	6H	R941	5G	C636	6E
D617	6E	R657	5C	R942	4C	C637	5B
D625	5D	R658	6A	R943	5F	C638	6E
D627	4G	R659	4I	R944	7F	C639	6E
D628	4F	R661	5I	R947	6I	C640	6F
D629	5G	R665	4A	R948	5G	C641	6F
D630	5C	R666	4H	R949	5D	C642	6F
D631	6F	R667	5B	R950	4G	C643	6F
D632	6F	R668	5B	R951	4G	C644	5F
D633	4G	R671	5E	R952A	4G	C645	6E
D634	4G	R672	4D	R955	5C	C646	4G
D635	6G	R673	4D	R956	5H	C647	5H
D636	6E	R674	4D	R957	5H	C648	4C
D637	6G	R675	4D	R958	5C	C649	5F
D638	4C	R676	4D	R959	5F	C650	5H
D639	6F	R677	2B	R960	5H	C651	4H
D640	6F	R678	4I	R961	4F	C652	4H
VR600	4B	R680	5B	R962	7G	C653	4H
L602	7H	R681	4D	R963	6F	C654	5I
L603	7H	R682	4D	R964	6G	C655	5G
L604	7H	R683	4D	R965	6H	C656	5G
L605	5D	R684	4D	R966	7G	C657	5G
L606	4C	R685	4D	R967	5F	C658	5H
Z600	5G	R686	4D	R968	6G	C659	5F
X600	5F	R687	6G	R969	6F	C660	5F
X601	5F	R688	3H	R970	6F	C661	4C
FL600	4E	R689	4E	R971	7C	C662	5G
S622	6B	R691	5B	R972A	6H	C665	5G
S623	6C	R692	4E	R973A	6G	C666	5G
S624	6B	R693	5G	R974	5F	C667	5G
S625	6H	R694	3I	R975	6G	C668	5F
S626	6B	R695	5A	R976A	7G	C669	5G
S627	6H	R696	7F	R977A	6G	C670	6H
S628	6A	R697	5I	R978A	7G	C671	7G
S629	4I	R698	6E	R979A	6G	C672	7F
S630	5A	R699	6F	R980A	6G	C673	7F
S631	4I	R901	6D	R981A	7G	C674	7F
S632	4A	R900	4I	R982	7G	C675	6G
S633	4I	R902	7E	R983A	7G		
S634	2B	R903	4I	R984A	7G		
S635	3H	R904	6F	C602	3H		